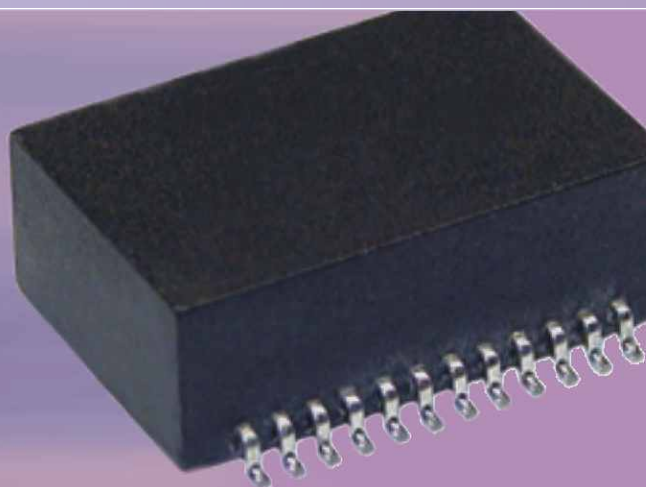




Networking



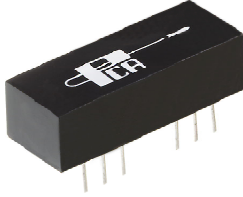


Contents

10Base-T Networking

PCA Part No.	OCL (μH)	Turns Ratio	Package Style	Length	Width	Height
EPA1829C		1:1/1:1	16 Pin DIP	1.00	.400	.350
EPA1990A	200	1:1/1:1	16 Pin DIP	1.00	.280	.300
EPA2013D		1:1/1:1	16 Pin DIP	1.00	.280	.310
EPE6009S	200	1:1/1:1	16 Pin SOIC	.460	.280	.230
EPE6010S	200	1:1.414	16 Pin SOIC	.460	.260	.230
EPE6047S	400	2CT:1CT/1CT:1CT	16 Pin SMD	.460	.260	.230
EPE6051GM		1:1/1:1	14 Pin PCMCIA	.800	.530	.084
EPE6065AS	200	1:1/1:1.41	16 Pin SMD	.500	.270	.200
EPE6066		1:1/1:1	12 Pin SIL	1.240	.330	.430
EPE6117		1:1	62 Pin DIP	1.700	1.025	.400
EPE6119G		1:1/1:1	16 Pin SMD	1.005	.280	.230
EPE6133AG		1:1	14 Pin PCMCIA	.800	.530	.084
EPE6133LG		1:1	14 Pin PCMCIA	.800	.530	.084
EPE6150G		1:1/1:1	16 Pin SMD	.930	.390	.235
EPE6152M		1:1/1:1	8 Pin SIP	1.050	.310	.430
EPE6166CSE	160	1:1/1:1.41	16 Pin SMD	.550	.280	.250
EPE6166S	140	1:1/1:1.41	16 Pin SMD	.550	.280	.250
EPE6225S	150	1:1/1CT:1CT	16 Pin SMD	1.120	.670	.260
EPE6243S		1:1/1:1	Quad Pkg	1.00	1.00	.285
EPE6250S		1:1	16 Pin SMD	.610	.510	.330
EPE6271S		1:1/1:1	20 Pin SOIC	.610	.510	.330
EPE6272		1:1.41/1:1	10 Pin SIP	1.05	.200	.450
EPE6313S		1:1/1:1.41	16 Pin SMD	.550	.280	.250
EPE6313SE		1:1/1:1.41	16 Pin SMD	.550	.280	.250
EPE6333G		2CT:1CT/1CT:1CT	16 Pin SMD	.990	.400	.252
EPE6343G		1:1/1:1	16 Pin SMD	.930	.390	.235
EPE6356S		1:1.41/1:1	16 Pin SMD	1.265	.720	.310
EPE6370G		2:1/1:1	16 Pin SMD	.980	.390	.375
EPE6376S	110	1CT:1CT/1CT:1.41CT	16 Pin SMD	.500	.270	.220
EPE6381		1CT:1.41/1:1	12 Pin DIL	.800	.400	.250
EPE6382	140	1CT:1.41/1CT:1CT	16 Pin DIP	.800	.285	.240
EPE6386G	100	1:1.414/1:1	12 Pin SMD	.990	.270	.265

10Base-T Interface Module with Enhanced Common Mode Attenuation EPA1829C

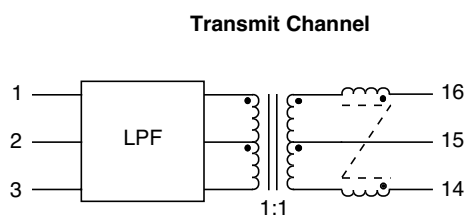


- General Purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

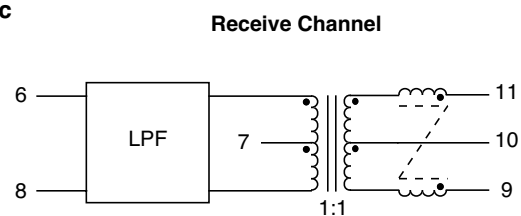
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-6/-4	-14/-9	-20/-15	-31/-24	-30/-30	-25/-25	-30/-30

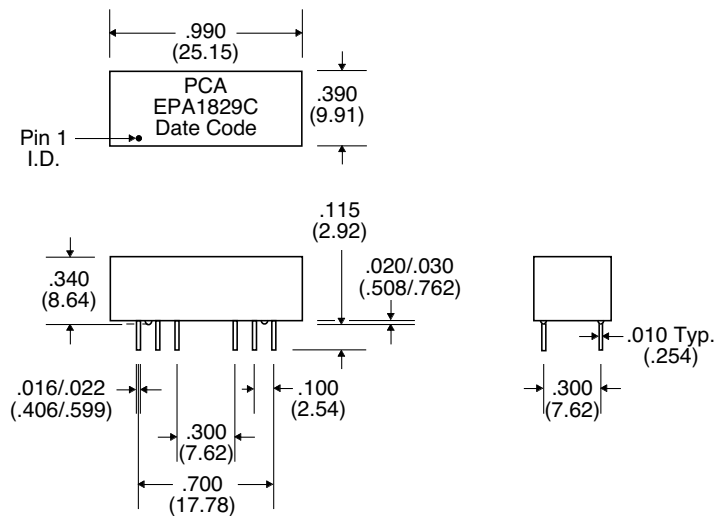
- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the Output Level Fundamental Frequency @ 5 MHz
- CMC is common to both channels



Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

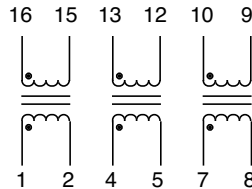


- Designed for IEEE 802.3 and ECMA Requirements
- Available in Low Profile S.O.I.C. 16 Pin SMD Package
- Hipot : both 2000 Vrms and 500 Vrms available in compliance with LAN's Safety Requirements

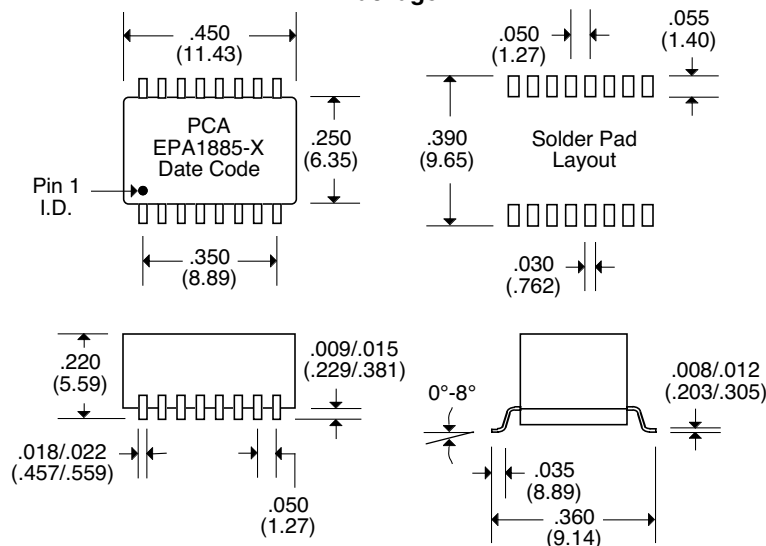
Electrical Parameters @ 25° C

PCA Part Number	OCL ($\mu\text{H} \pm 20\%$)	Interwinding Capacitance (pF Max.)	Leakage Inductance ($\mu\text{H} \text{ Max.}$)	Et-Constant (V- $\mu\text{Sec. Typ.}$)	Rise Time (nS Max.)	Turns Ratio ($\pm 5\%$)	DCR ($\Omega \text{ Max.}$)
EPA1885-1	25	5	0.15	2.0	3.0	1:1	0.15
EPA1885-2	30	5	0.15	2.0	3.0	1:1	0.15
EPA1885-3	35	6	0.15	2.0	3.0	1:1	0.20
EPA1885-4	50	7	0.20	2.0	3.0	1:1	0.20
EPA1885-5	75	8	0.20	2.4	3.0	1:1	0.30
EPA1885-6	100	9	0.25	2.5	3.0	1:1	0.30
EPA1885-7	125	10	0.25	3.0	3.0	1:1	0.30
EPA1885-8	150	11	0.25	3.0	3.0	1:1	0.40
EPA1885-9	175	12	0.25	3.0	3.5	1:1	0.50
EPA1885-10	200	13	0.30	3.5	3.5	1:1	0.50

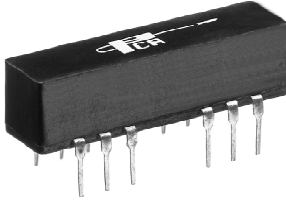
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



- General Purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD and DIP Packages

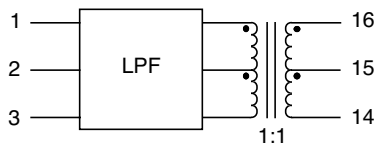
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	OCL (μ H Min.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Crosstalk (dB Min.)
± 1.0 MHz		1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	1-10 MHz
Xmit/Rcv		Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	200	-1/-1	-15/-15	-7/-6	-19/-14	-30/-20	-35/-31	-30/-30

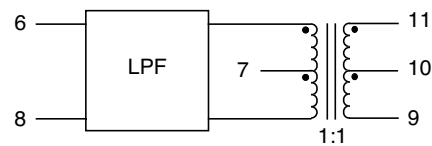
- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the Output Level Fundamental Frequency @ 5 MHz
- CMC is common to both channels

Schematic

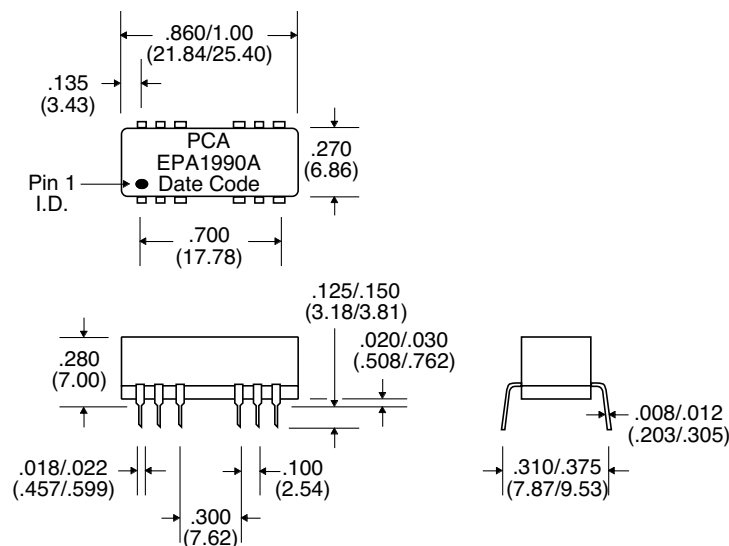
Transmit Channel



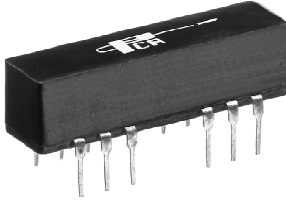
Receive Channel



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



- General Purposre 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD and DIP Packages

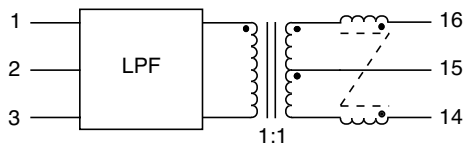
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit	Xmit	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-6	-19/-14	-30/-20	-35/-31	-30	-25	-30/-30

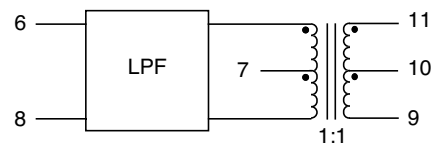
- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the Output Level Fundamental Frequency @ 5 MHz
- CMC is common to both channels

Schematic

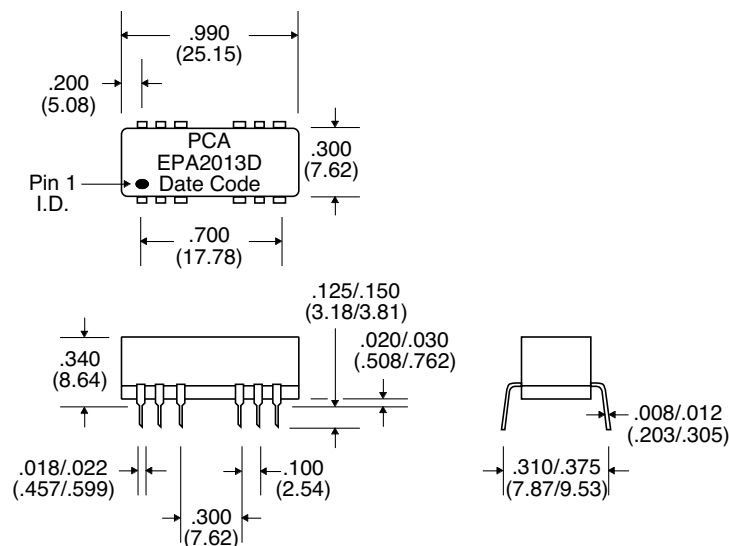
Transmit Channel



Receive Channel



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T Interface Module Isolation Transformer EPE6009S

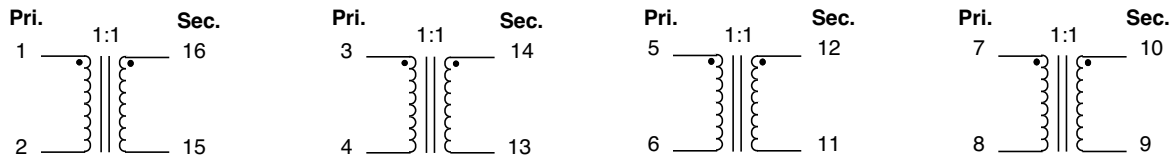


- Optimized for Level One LXT915
- Four Receiver Channel in one small Outline Package
- Robust design allows for toughest soldering processes
- Complies with or exceeds IEEE802.3, 10Base-T Requirements

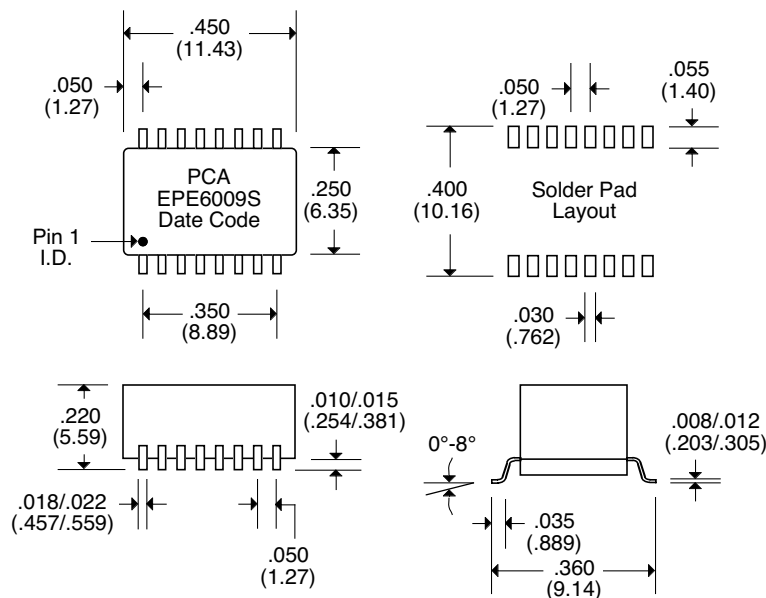
Electrical Parameters @ 25° C

Secondary Inductance (μ H Min.)	Interwinding Capitance (pF Max.)	Leakage Inductance (μ H Min.)	DCR (Ω Max.)	Hipot (Vrms)
@ 100 KHz, 0.1Vrms	@ 100 KHz, 0.1Vrms	@ 100 KHz, 0.1Vrms		
200	10	.15 @ Pri.	0.350	1500

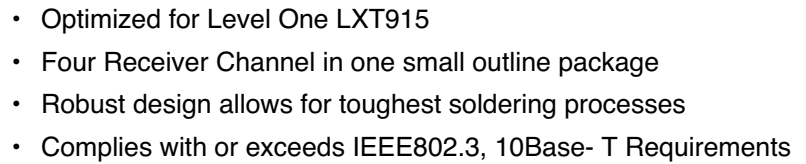
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



Secondary Inductance (μ H Min.)	Interwinding Capitance (pF Max.)	Leakage Inductance (μ H Min.)	DCR (Ω Max.)	Hipot (Vrms)
@ 100 KHz, 0.1Vrms	@ 100 KHz, 0.1Vrms	@ 100 KHz, 0.1Vrms		
200	10	.25 @Pri.	0.350	1500

Pri. 1: $\sqrt{2}$ **Sec.**
 1 ——— 16
 2 ——— 15
 3 ——— 14
 4 ——— 13
 5 ——— 12
 6 ——— 11
 7 ——— 10
 8 ——— 9

Figure 1: Mechanical drawing of the PCA EPE6010S package. The drawing includes three views: a top view, a side view, and a cross-sectional view. The top view shows a rectangular package with dimensions: overall width .450 (11.43), overall height .250 (6.35), and pin pitch .030 (.762). The side view shows the package height .220 (5.59) and pin height .010/.015 (.254/.381). The cross-sectional view shows the package thickness .008/.012 (.203/.305) and the solder pad layout dimensions: .050 (1.27) for the pad width, .055 (1.40) for the pad thickness, .400 (10.16) for the pad length, and .030 (.762) for the pad pitch. The package is labeled 'PCA EPE6010S Date Code' and 'Pin 1 I.D.'.

TEL: (818) 892-0761
FAX: (818) 894-5791
<http://www.pca.com>



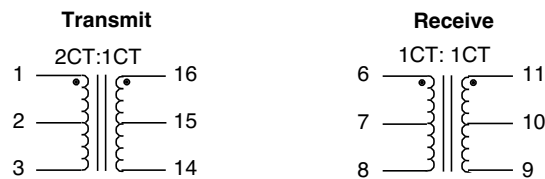
- Designed for use with Seeq 83C95
- General Purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD, DIP & DIL Packages
Optional Tape and Reel Packaging
- Hipot : 2000 Vrms

Electrical Parameters @ 25° C

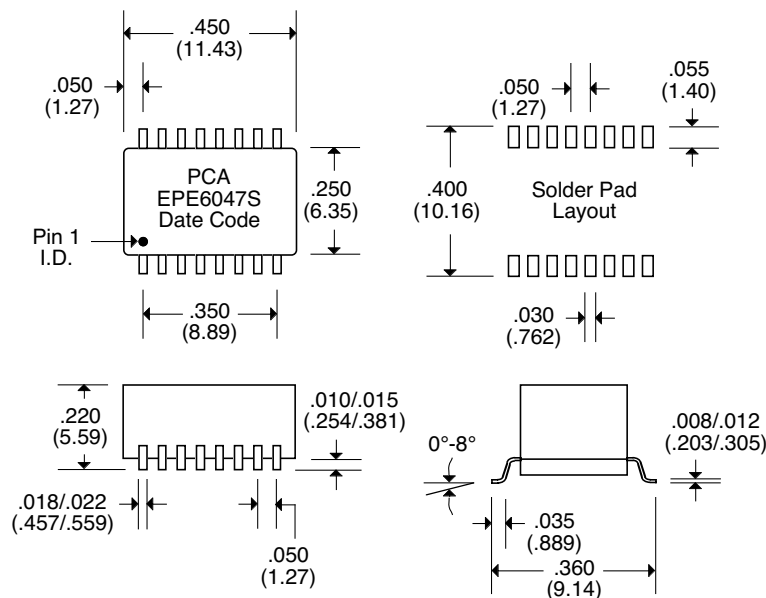
Inductance ($\mu\text{H} \pm 20\%$)		Interwinding Capacitance (pF Max.)	Leakage Inductance ($\mu\text{H} \text{ Max.}$)		Et Prodcut (V- μS Typ.)	Rise Time (nS Max..)	DCR (Ω Max.)	
@100 KHz, 0.1 Vrms		@100 KHz, 0.1 Vrms	@100 KHz, 0.1 Vrms					
Xmit	Rcv	from Input to Output	Xmit	Rcv			Xmit	Rcv
400	100	10	0.30	0.17	2.0	3.0	0.45	0.30
Pins 1-3	Pins 6-8		Pins 16-14 w/ 1,2,3 shorted	Pins 6-8 w/ 9,10,11 shorted			Pins 1-3	Pins 6-8, 11-9, 16-14

- **Isolation** : meets or exceeds 802.3 IEEE Requirements •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10Base-T Interface Module for PC Card Applications

EPE6051GM



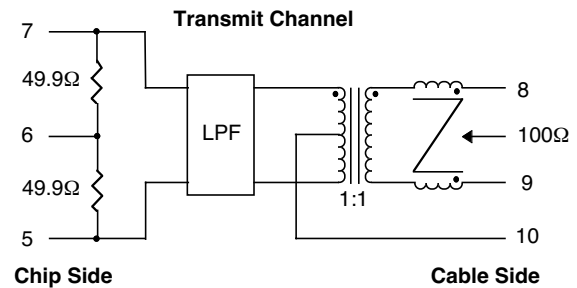
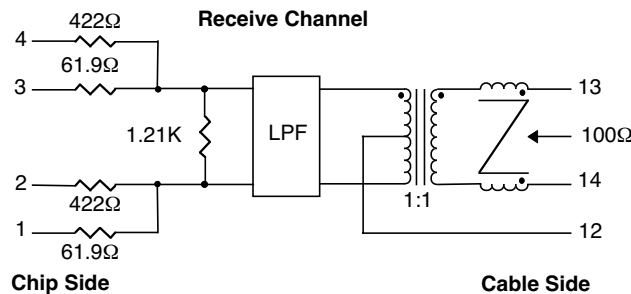
- Optimized for AMD/PHY type chip for Card Bus
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

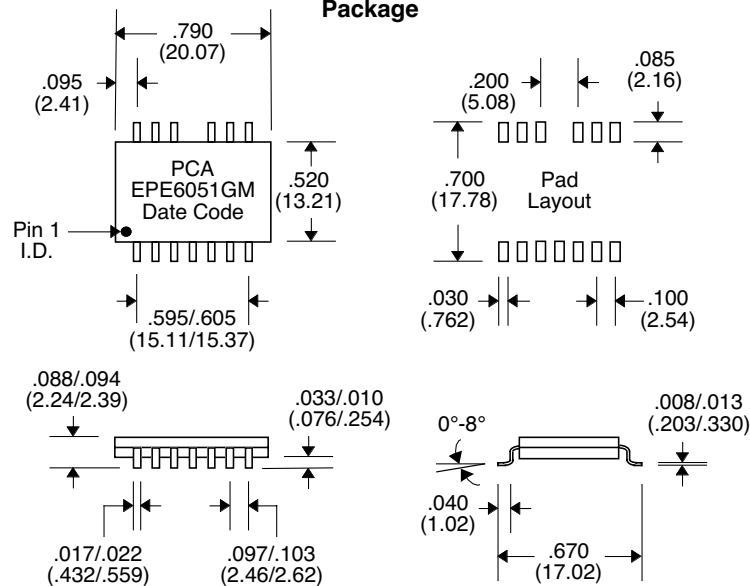
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-30/-30	-30/-30	-20/-20	-30/-30

- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the filter output @ 5 MHz for filter only, excluding resistor network

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T Isolation Transformer with Common Mode Choke EPE6065AS

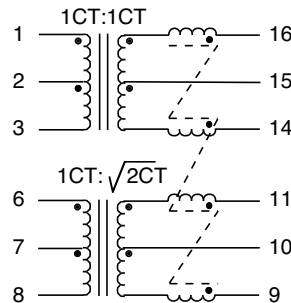


- Optimized for Level One's LX901 and Fujitsu's MB86961 Transceiver Chips
- Complies with or exceeds IEEE 802.3, 10Base- T Standards
- 1500 Vrms Isolation

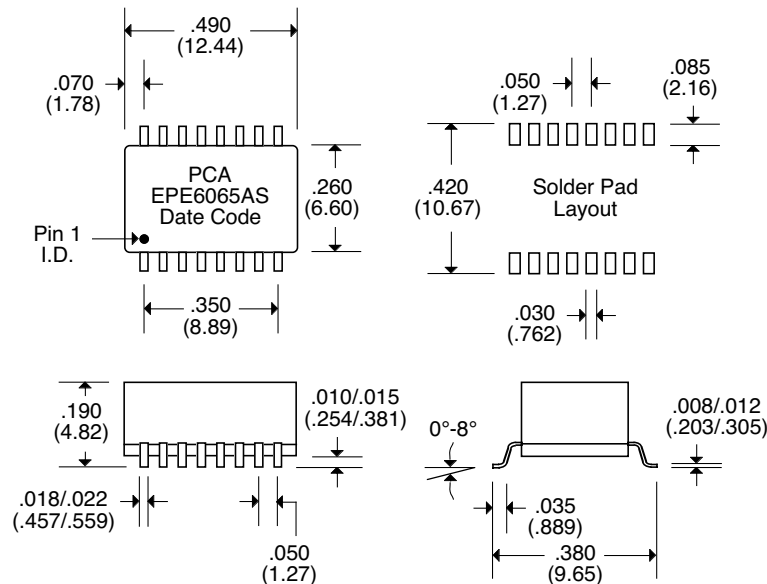
Electrical Parameters @ 25° C

Inductance (μ H Min.)	Interwinding Capacitance (pF Max.)	Leakage Inductance (μ H Max.)	Primary DCR (Ω Max.)
@100 KHz, 0.1 Vrms	@100 KHz, 0.1 Vrms	@100 KHz, 0.1 Vrms	
200	12	0.20	0.35

Schematic

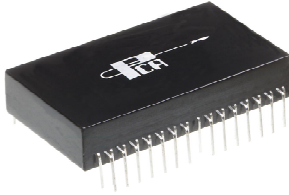


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10 Base-T Multiport Module with Enhanced Common Mode Attenuation EPE6117



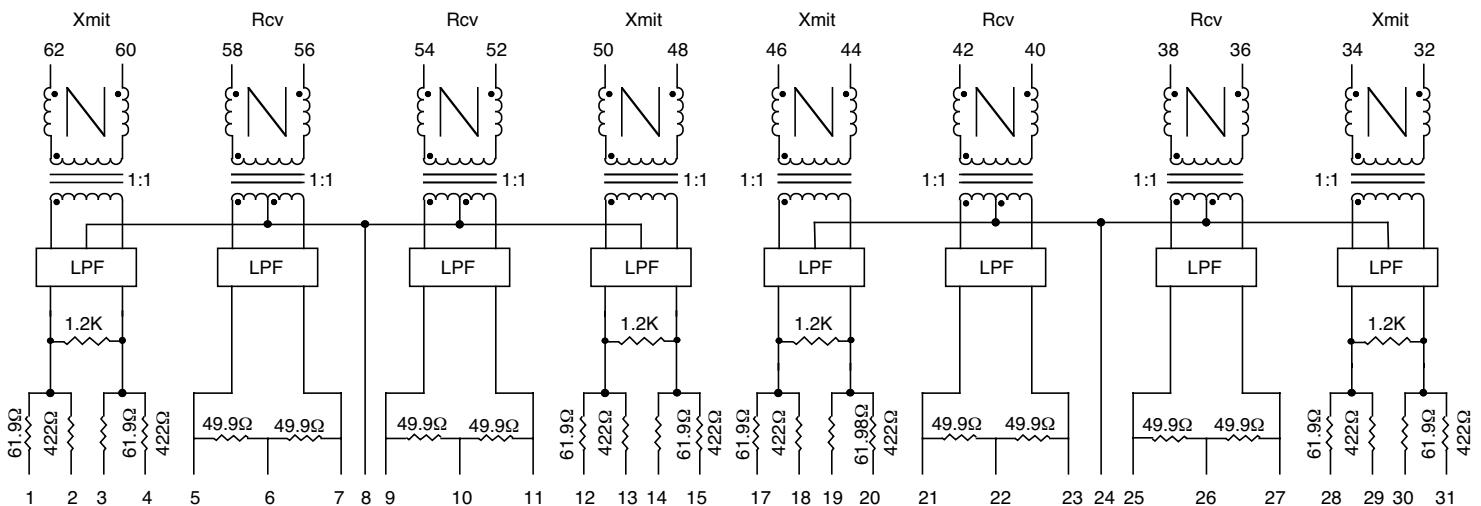
- Optimized for AMD Repeater Chips
- Low Crosstalk enhances network reliability
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

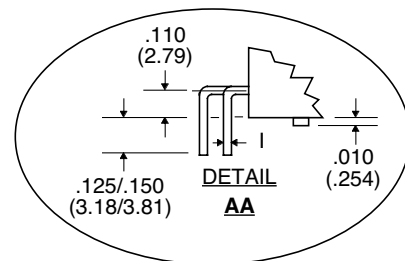
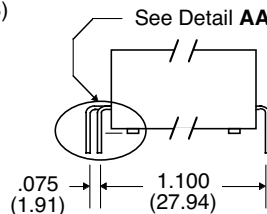
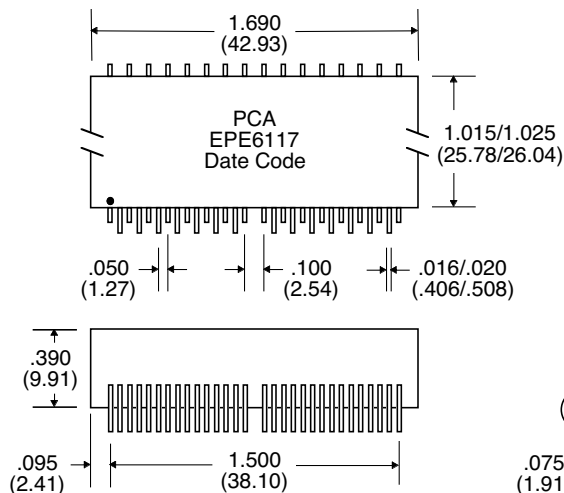
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-30/-30	-30/-30	-35/-35

• **Isolation** : meets or exceeds 802.3 IEEE Requirements • **Characteristic Filter Impedance** : 100 Ω •

Schematic

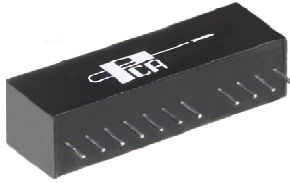


Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T Hub Module with Enhanced CMA and Resistor Network EPE6066



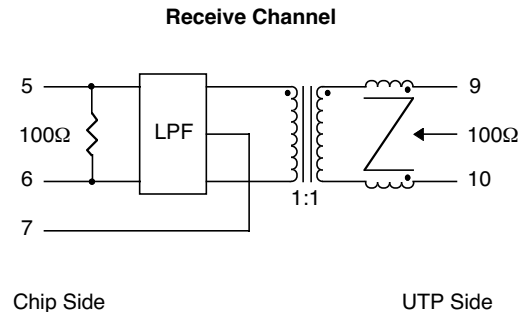
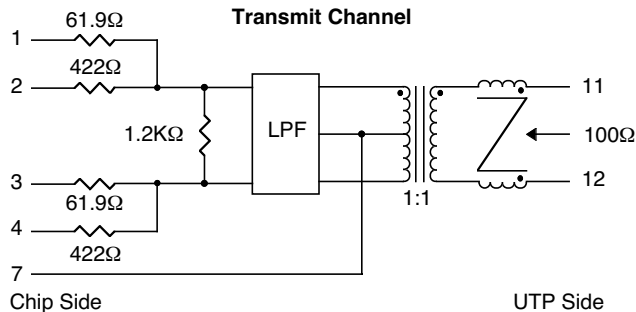
- Optimized for AMD/PHY Controllers
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 50-70 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-20	-33/-26	-30/-30	-30/-30	-35/-35

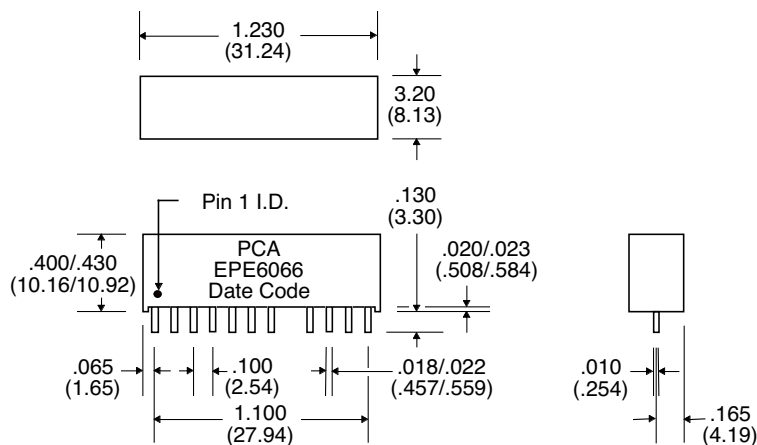
• **Isolation** : meets or exceeds 802.3 IEEE Requirements • **Characteristic Filter Impedance** : 100 Ω •

Schematic



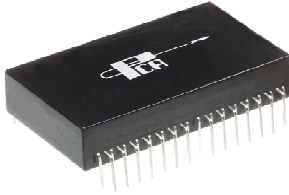
All Resistors are matched within ± 1 %.

Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10 Base-T Multiport Module with Enhanced Common Mode Attenuation EPE6117



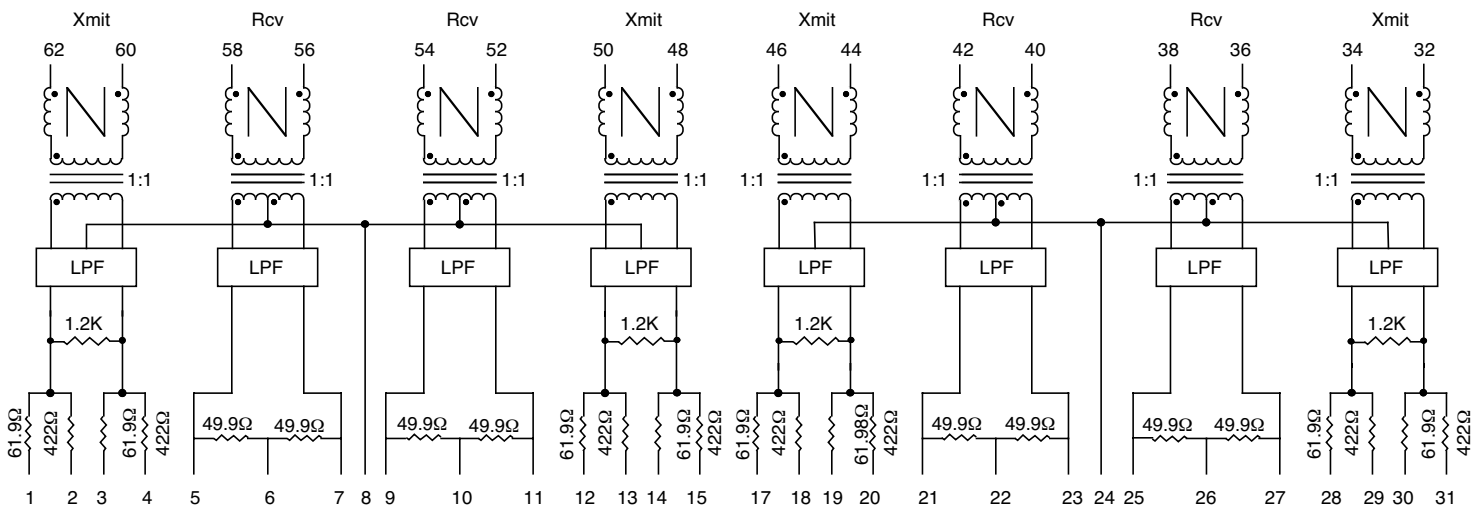
- Optimized for AMD Repeater Chips
- Low Crosstalk enhances network reliability
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

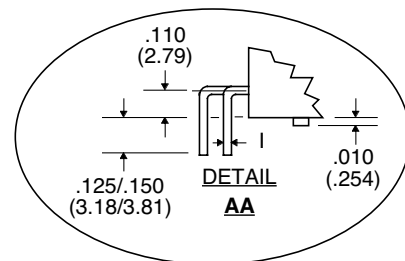
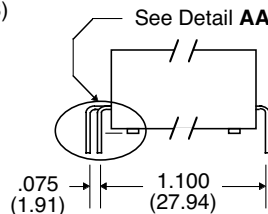
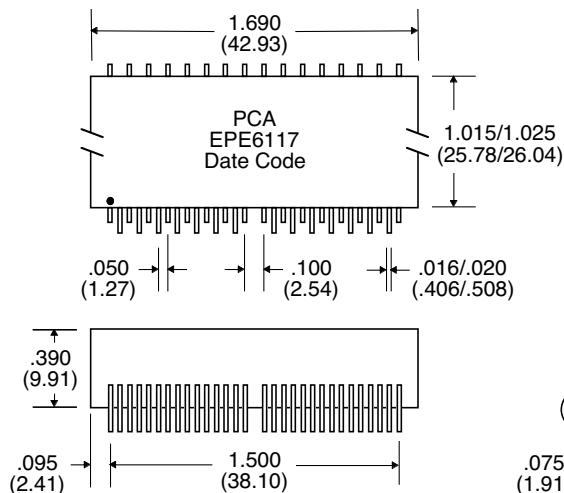
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-30/-30	-30/-30	-35/-35

• **Isolation** : meets or exceeds 802.3 IEEE Requirements • **Characteristic Filter Impedance** : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

EPE6119G & EPE6119G-RC



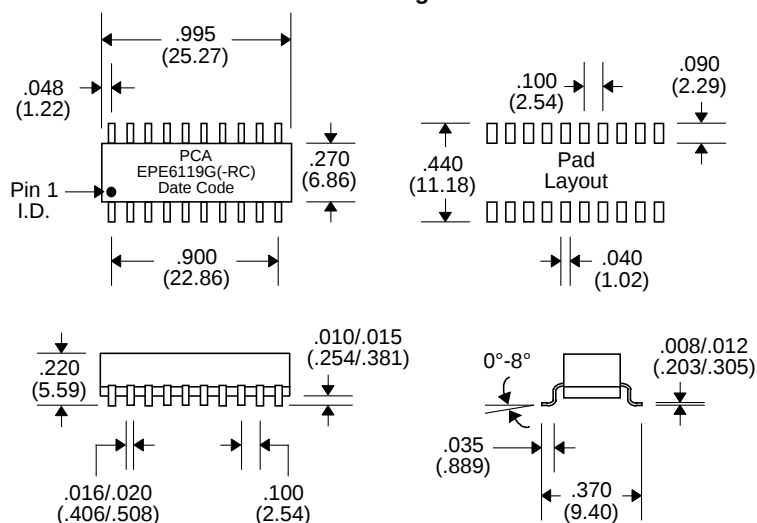
- General Purpose 10Base-T Filter Module
- Robust construction allows for toughest reflow processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Peak Solder Rating (See Note 2)
- RoHS Compliant

Electrical Parameters @ 25° C

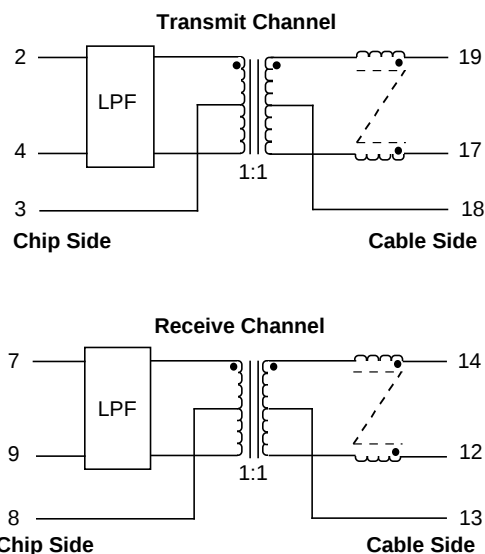
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)	Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	50-100 MHz	1-100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
17/17	-1/-1	-15/-15	-7/-6	-18/-14	-30/-20	-32/-31	-30/-30	-35

• **Isolation** : Meets or exceeds 802.3 IEEE Requirements • **Characteristic Filter Impedance** : 100 Ω •

Package



Schematic



Notes :	EPE6119G	EPE6119G-RC
1. Assembly Process (Solder Composition)	SnPb	Pb-Free + (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)	MSL = 3 (168 Hours, ≤30°C/60%RH)	MSL = 4 (72 Hours, ≤30°C/60%RH)
4. Weight	1.85 grams	1.85 grams
5. Packaging Information (*Add "TR" to end of part number when placing order)	(Tube) 19 pieces/tube (Tape & Reel) 550 pieces/13" reel (*EPE6119G-TR)	(Tube) 19 pieces/tube (Tape & Reel) 550 pieces/13" reel (*EPE6119G-RC-TR)

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T PC Card Module with Enhanced CMA and Resistor Network EPE6133AG



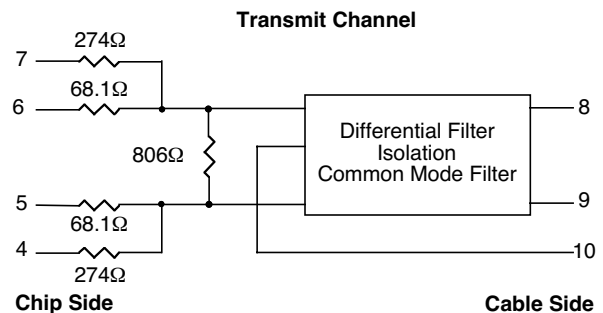
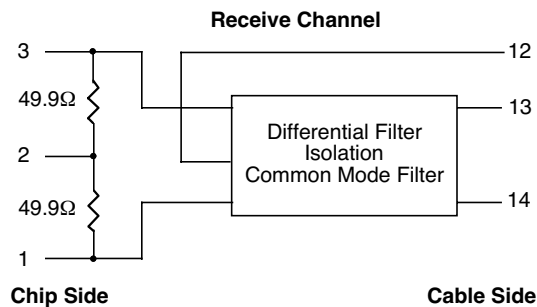
- Optimized for SMC 91C94 Chip
- Recommended for National, AT&T PHY Chips
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

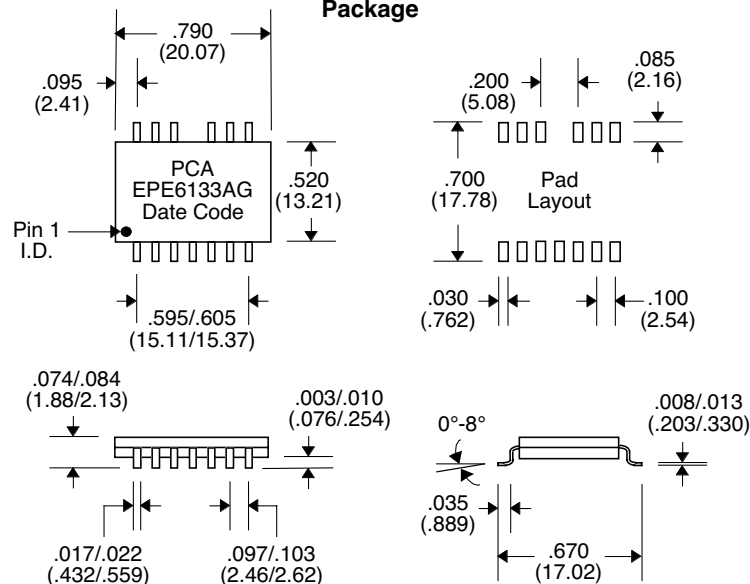
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-25/-25	-7/-5	-15/-11	-25/-15	-30/-25	-30/-30	-30/-30	-30/-30	-20/-20

- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the filter output @ 5 MHz for filter only, excluding resistor network

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T PC Card Module with Enhanced CMA and Resistor Network EPE6133LG



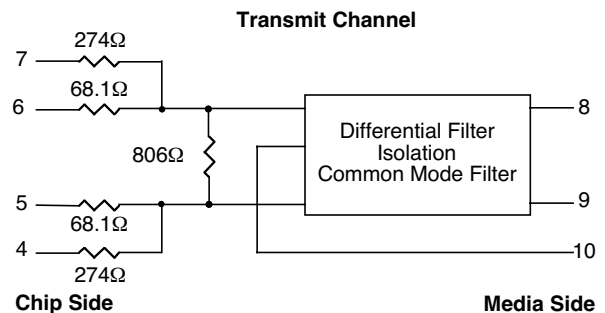
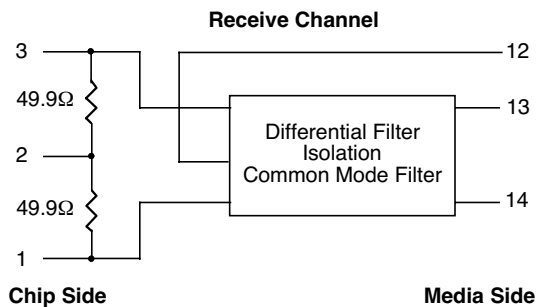
- Recommended for National, AT&T PHY Chips
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

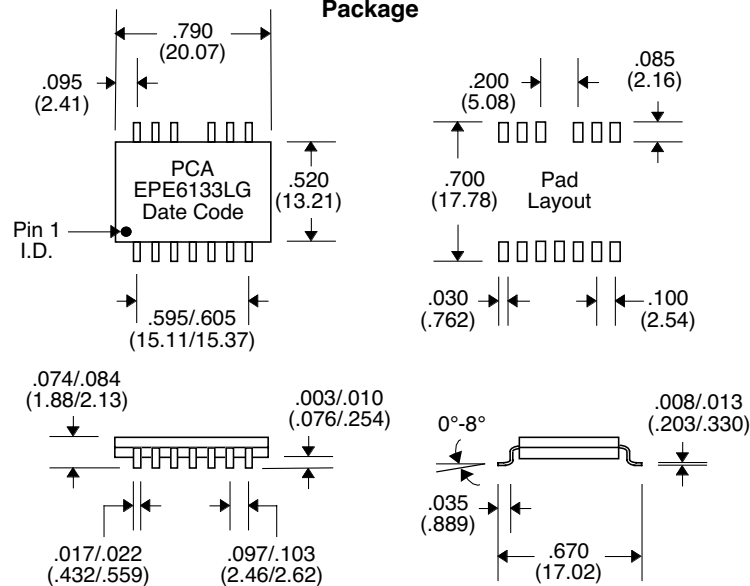
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-25/-25	-7/-5	-15/-11	-25/-15	-30/-25	-30/-30	-30/-30	-30/-30	-20/-20

- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the filter output @ 5 MHz for filter only, excluding resistor network

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10Base-T Interface Module with all Resistors Integrated EPE6150G



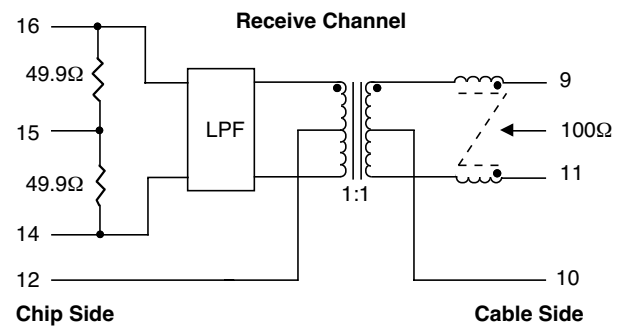
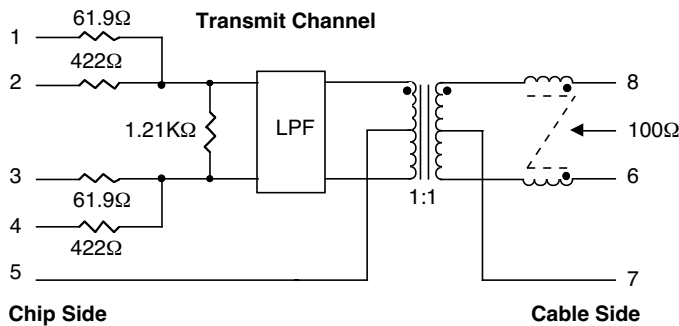
- Optimized for AMD/PHY Controllers
- Robust construction allows for toughest reflow processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

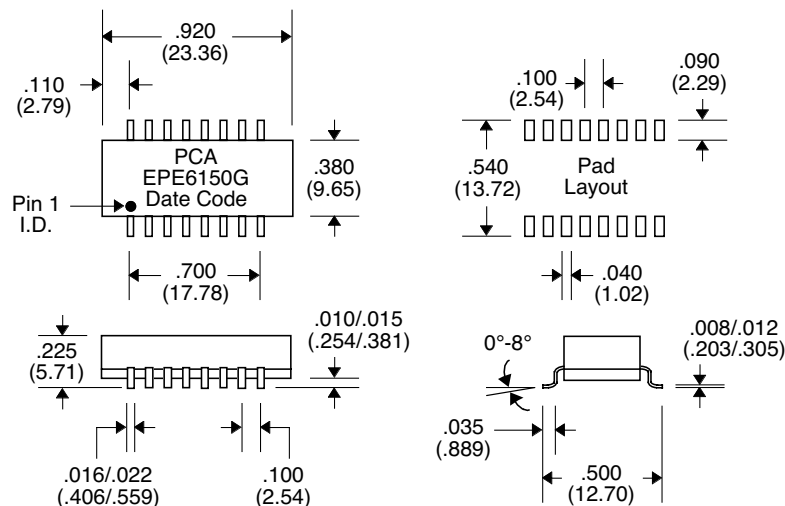
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-45/-45	-30/-30	-20/-20	-35/-35

• Isolation : Meets or exceeds 802.3 IEEE Requirements • Characteristic Filter Impedance : 100 Ω •

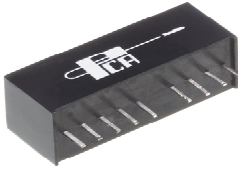
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



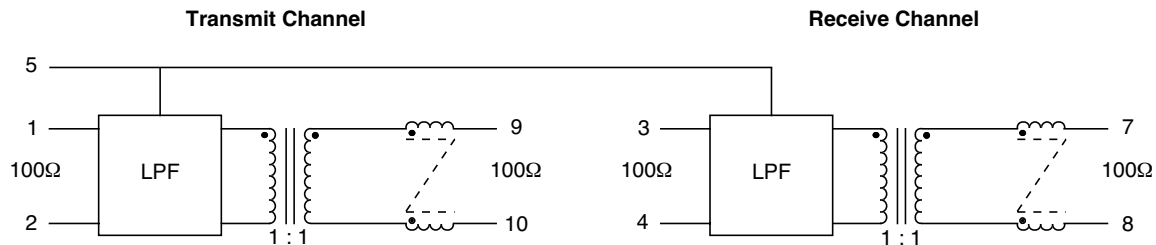
- Recommended for AMD MACE Chips
- General Purpose 10 Base-T Filter Module
- Robust construction allows for IR/VP processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD, DIP, DIL, and SIP Packages
(Pin-outs may vary)

Electrical Parameters @ 25° C

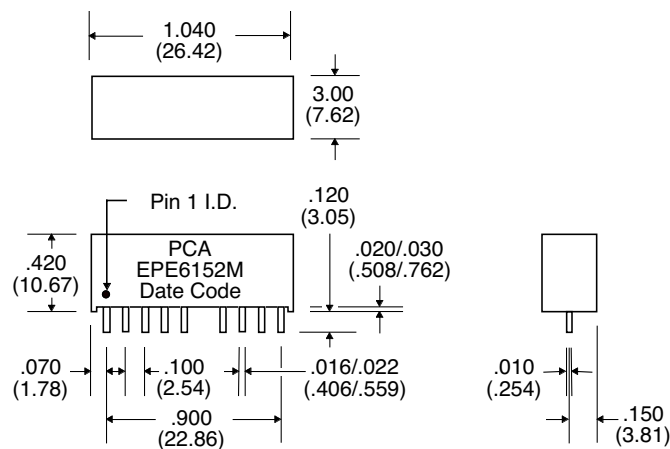
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-45/-40	-30/-30	-20/-20	-35

- Isolation : meets or exceeds 802.3 IEEE Requirements
- Characteristic Filter Impedance : 100 Ω
- Insertion Loss : Referenced @ 5 MHz

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



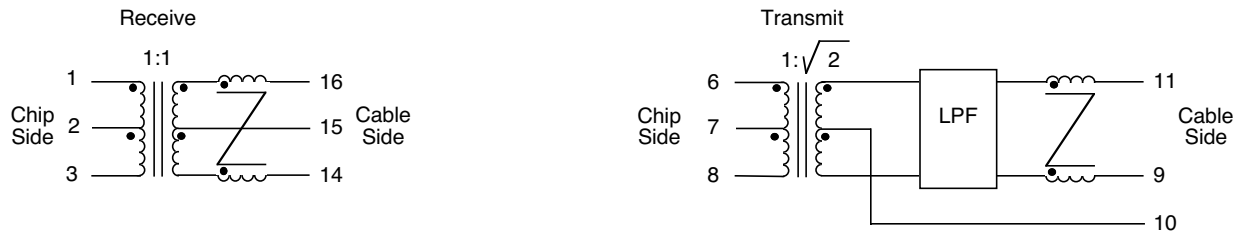
- Robust construction allows for toughest reflow processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

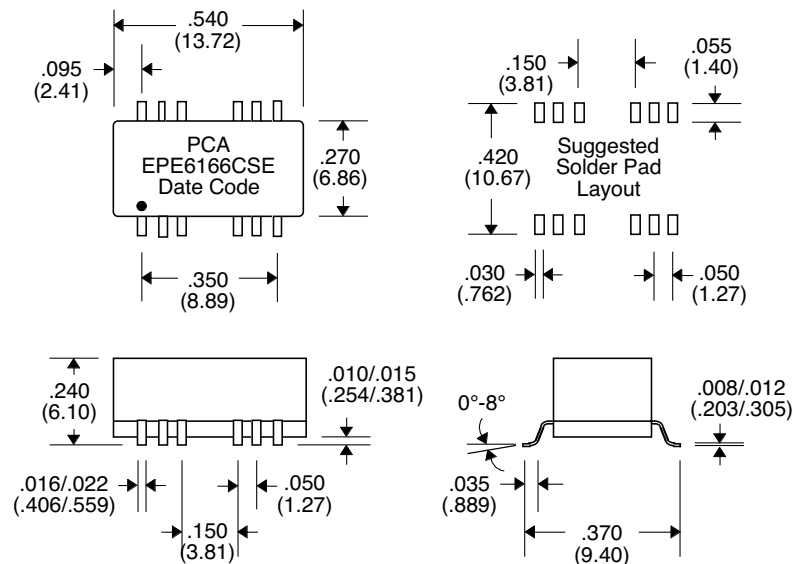
OCL (μ H Min.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
@ 100 KHz, 20 mVrms	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	10-30 MHz	30-100 MHz	1-10 MHz
Cable Side	Xmit	Xmit	Xmit	Xmit	Xmit	Xmit	Xmit/Rcv	Xmit/Rcv	Between Channels
160	-1	-15	-5	-14	-24	-30	-40	-30	-30

• Cut-off Frequency : 17 MHz $\pm$ 1, Ref. @ 5 MHz • Cable Side Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm$.010 / .25



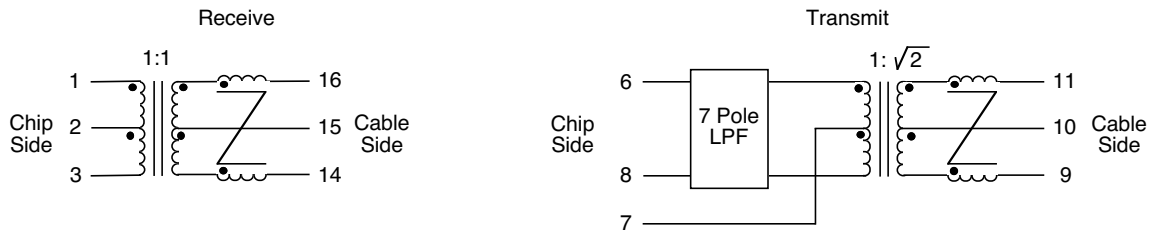
- Robust construction allows for toughest reflow processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

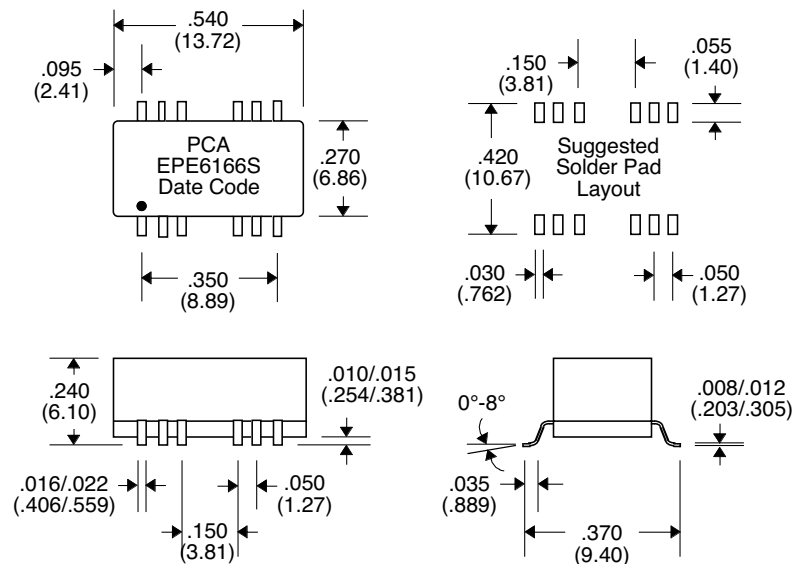
OCL (μ H Min.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)	Crosstalk (dB Min.)
@ 100 KHz, 20 mVrms	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	30-100 MHz	1-10 MHz
Cable Side	Xmit	Xmit	Xmit	Xmit	Xmit	Xmit	Xmit	Between Channels
140	-1	-15	-7	-18	-30	-35	-30	-30

• Cut-off Frequency : 17 MHz $\pm$ 1, Ref. @ 5 MHz • Characteristic Filter Impedance : Xmit 52 Ω , Rcv 100 Ω •

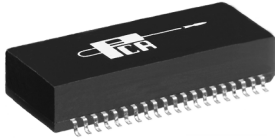
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm$.010 / .25

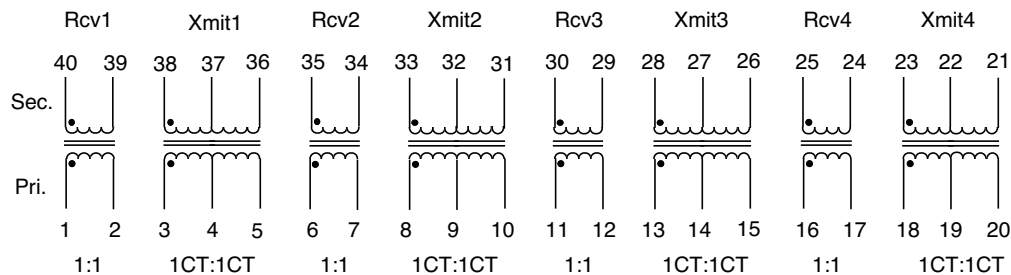


- 4 Transmit, 4 Receive Quad Port Surface Mount Filter
- Operating Temperature -0°C to 70°C
- 1500 Vrms Isolation

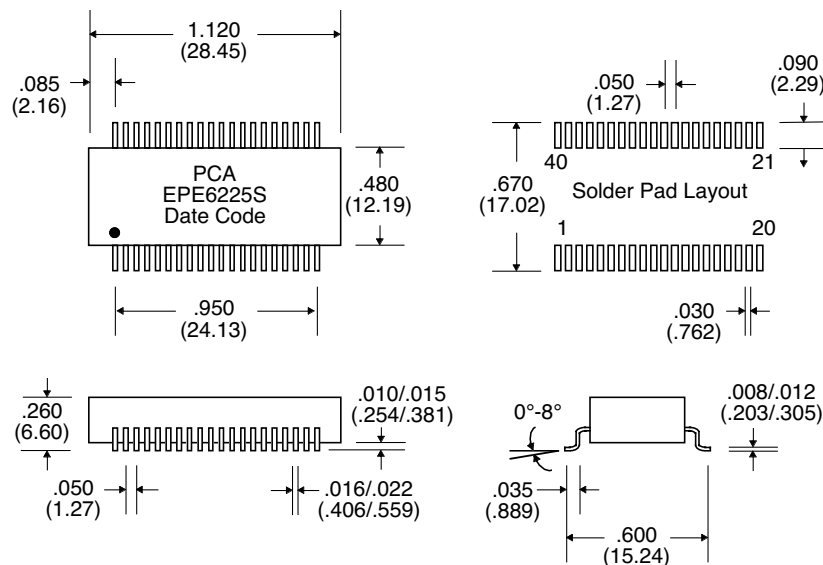
Electrical Parameters @ 25° C

Primary Inductance (μ H min.)	Leakage Inductance (μ H Max.)	Interwinding Capacitance (pF Max.)	Insertion Loss (dB Max)	Return Loss (dB	Common Mode Rejection TX Side (dB Min.)				Crosstalk (dB Typ.)
@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	1-10 MHz	5-10 MHz	1-10 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	5-10 MHz
Xmit & Rcv			Xmit & Rcv	Xmit & Rcv					Xmit & Rcv
150	0.30	10	-1.0	-20	-40	-30	-20	-10	-50

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

4-Port 10Base-T Interface Module with Enhanced Common Mode Attenuation

EPE6243S

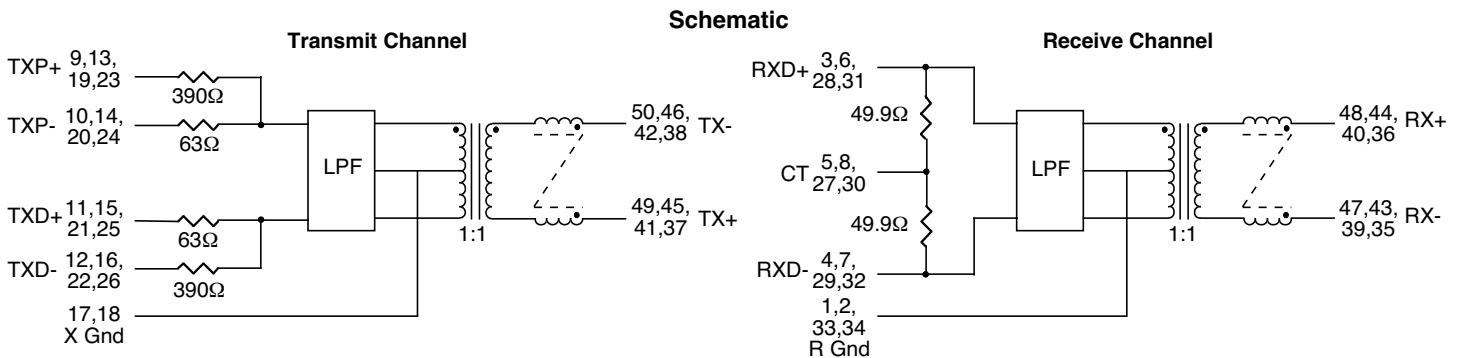


- Optimized for LSI L64381 Chip
- Robust construction allows for solder reflow processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

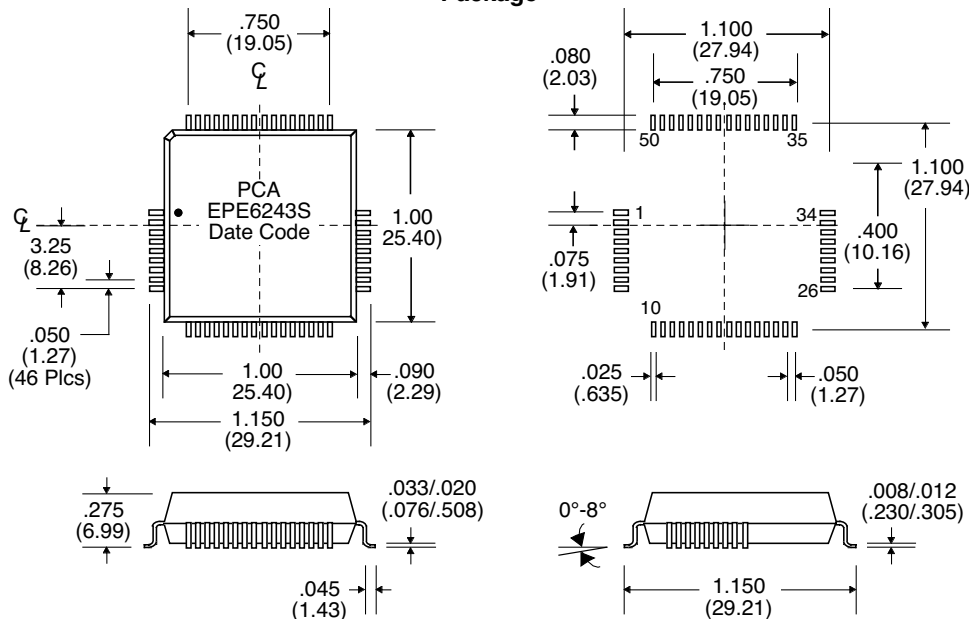
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss † (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)					Crosstalk (dB Min.)
± 1.0/± 1.5	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 5 MHz	@ 10 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/19.5	-6/-6.5	-15/-15	-8/-6	-16/-11	-27/-16	-50/-32	-45/-30	-40/-30	-30/-38	-25/-27	-30/-30

• Optimized design to give 3 nS Group Delay Difference over 5 MHz-10 MHz • † Resistor Network Included •



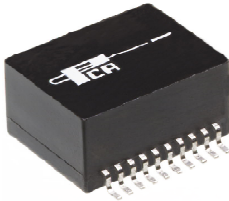
Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

Miniature 10 Base-T Multiport Module with Enhanced Common Mode Attenuation

EPE6250S



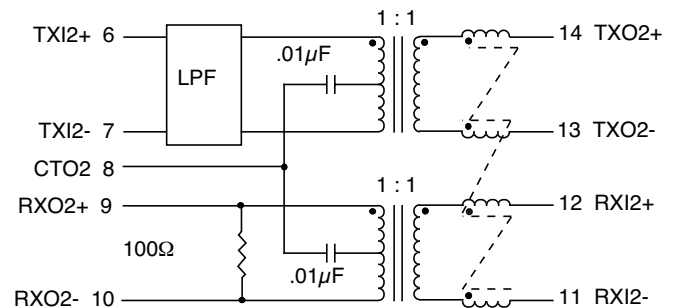
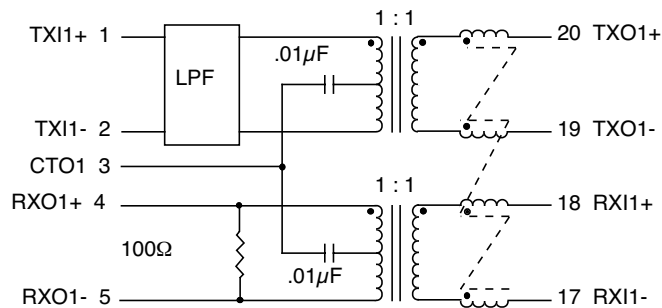
- Optimized for AMD 79C984 Integrated Multiport Repeater
- Robust Construction allows for toughest Reflow Processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

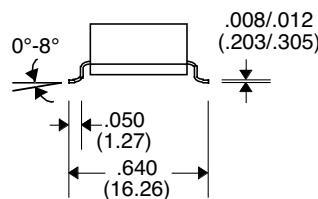
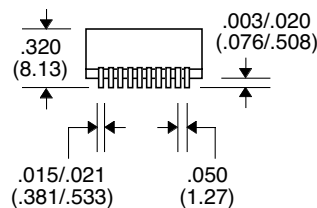
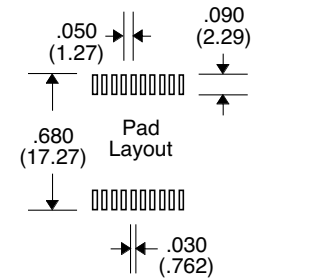
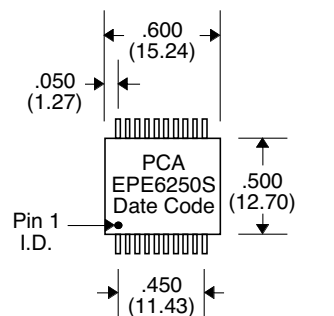
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.5 MHz	1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
22.5	-1/-1	-15/-25	-3/-1	-5/-1	-10/-1	-40/-35	-35/-25	-35/-20	-30/-30

• **Isolation** : meets or exceeds 802.3 IEEE Requirements • **Characteristic Filter Impedance** : 100 Ω •

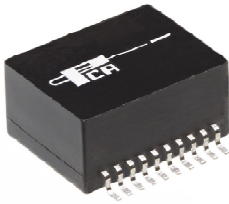
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

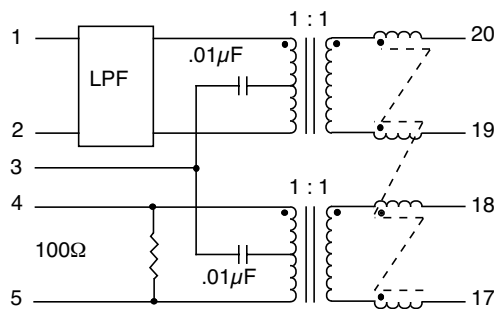


- Optimized for AMD 79C984 Integrated Multiport Repeater
- Robust Construction allows for toughest Reflow Processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

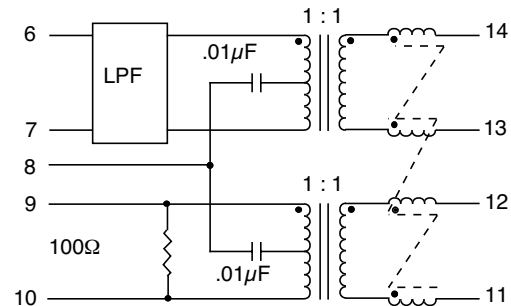
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
22.5	-1/-1	-15/-25	-3/-1	-5/-1	-10/-1	-40/-35	-35/-25	-35/-20	-30/-30

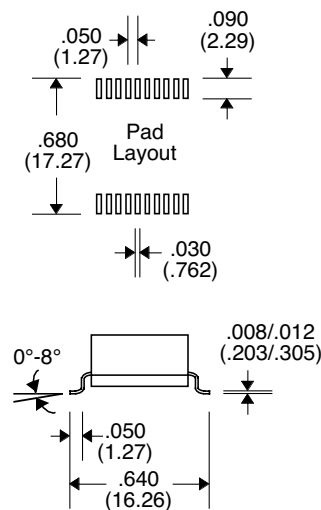
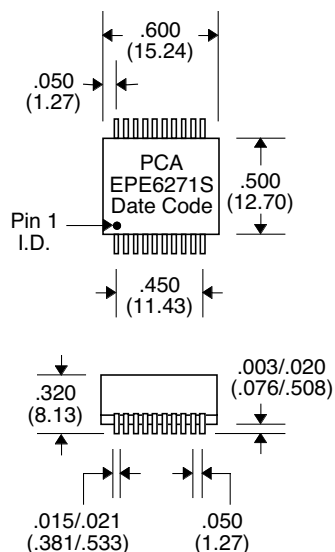
• Isolation : meets or exceeds 802.3 IEEE Requirements • Characteristic Filter Impedance : 100 Ω •



Schematic



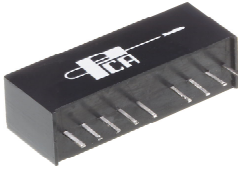
Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10 Base-T Interface Module for PCI BUS Applications

EPE6272



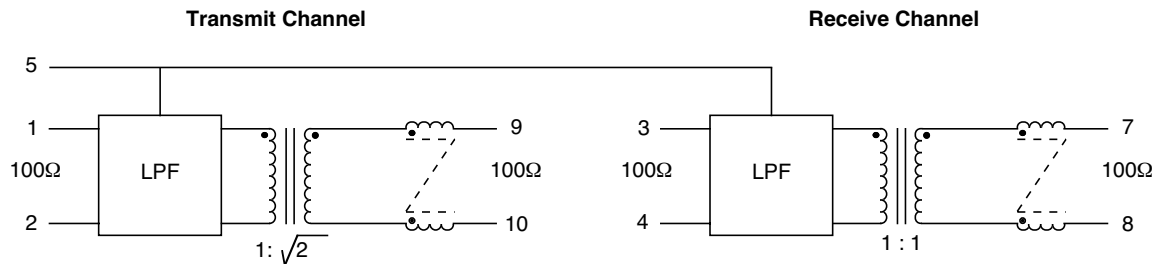
- Compatible with PCI Bus 3.3V requirement
- Recommended for use with DEC 21041 Controller
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD, PC Card Packages

Electrical Parameters @ 25° C

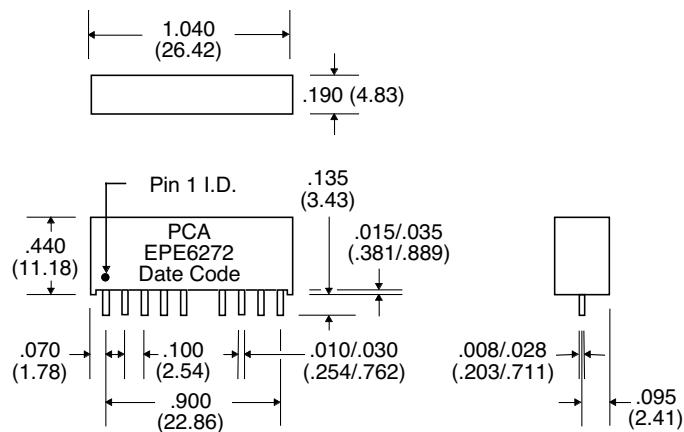
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/-5	-18/-11	-30/-18	-35/-26	-30/-30	-30/-30	-31/-31

- **Isolation** : meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced @ 5 MHz

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

Miniature 10Base-T Interface Module with Enhanced Common Mode Attenuation EPE6313S



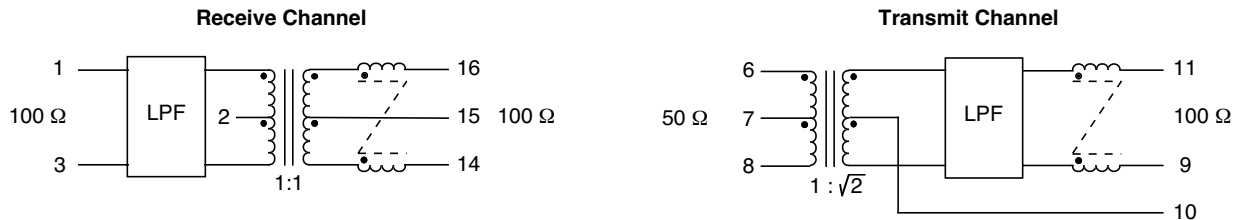
- Designed for use with Level One's LXT901 Chip
- Robust design allows to withstand current soldering profiles
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

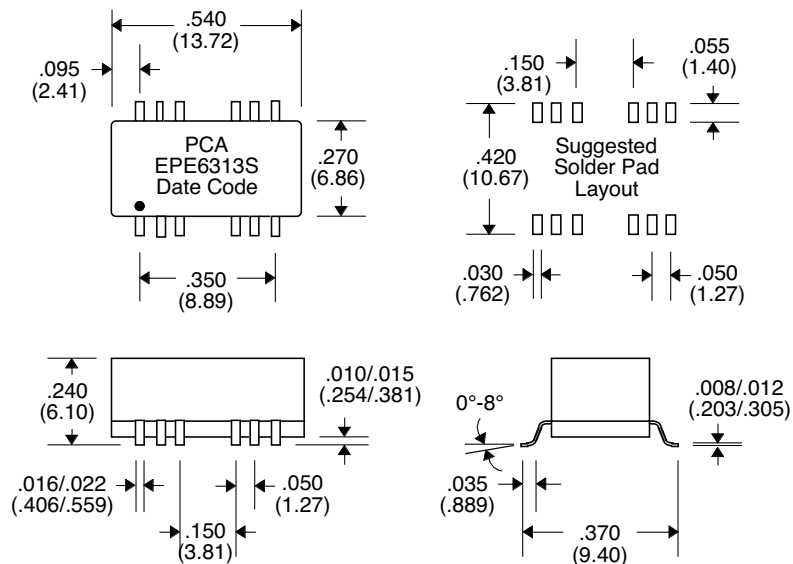
Cut-Off Frequency (MHz)	Insertion Loss † (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)	Crosstalk (dB Min.)
± 1.0	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	30-100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Between Channels
17/17	-1/-1	-15/-15	-5/-4	-14/-9	-24/-15	-30/-24	-30/-30	-30

• † Referenced to the Output Level Fundamental Frequency @ 5 MHz •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

Miniature 10Base-T Interface Module with Enhanced Common Mode Attenuation EPE6313SE



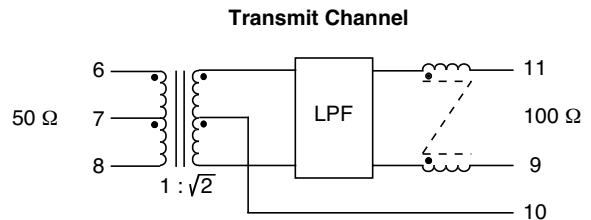
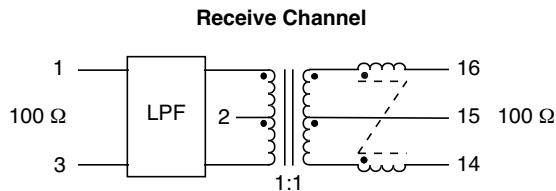
- Designed for use with Level One's LXT901 Chip
- Robust design allows to withstand current soldering profiles
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Operating Temperature : -40°C to +85°C

Electrical Parameters @ 25° C

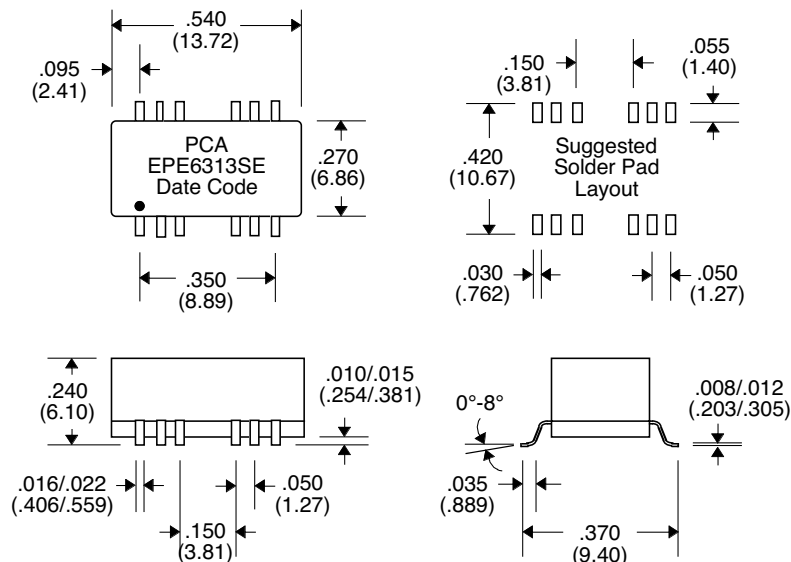
Cut-Off Frequency (MHz)	Insertion Loss † (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)	Crosstalk (dB Min.)
± 1.0	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	30-100 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Between Channels
17/17	-1/-1	-15/-15	-5/-4	-14/-9	-24/-15	-30/-24	-30/-30	-30

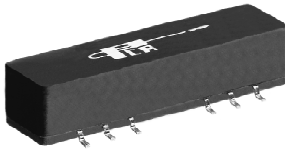
• † Referenced to the Output Level Fundamental Frequency @ 5 MHz •

Schematic



Package





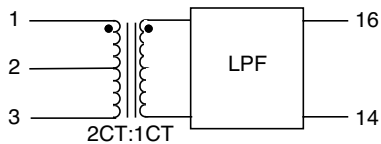
- Optimized for ML4664 and ML 4669
- Robust construction for reflow processes
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

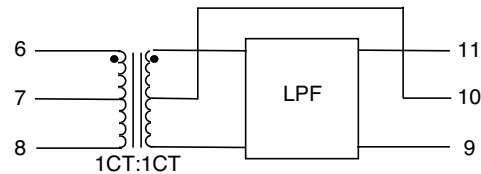
Insertion Loss (dB Max.)	Return Loss (dB Typ.)	Attenuation (dB Min.)				Crosstalk (dB Min.)
1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
-1/-1	-15/-15	-5/-5	-10/-10	-16/-16	-20/-20	-30

Schematic

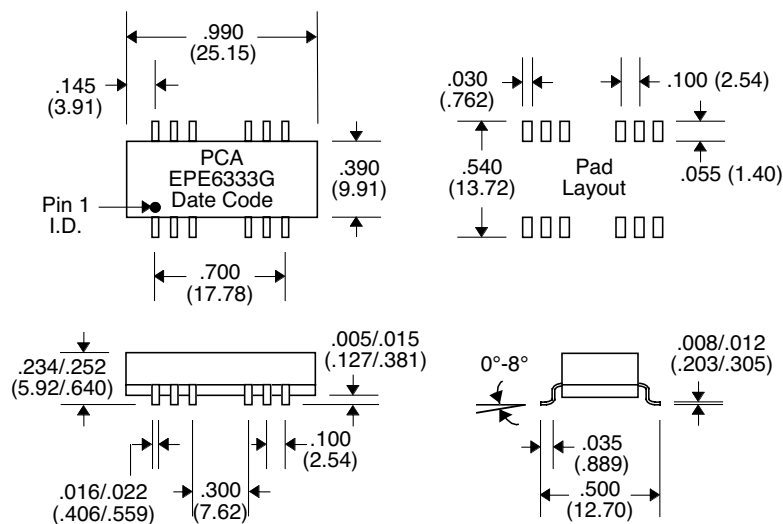
Transmit Channel



Receive Channel



Package



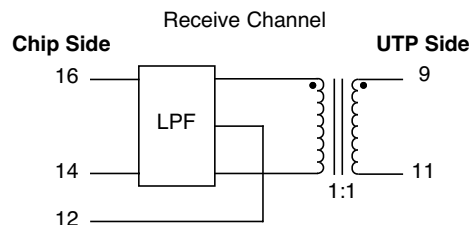
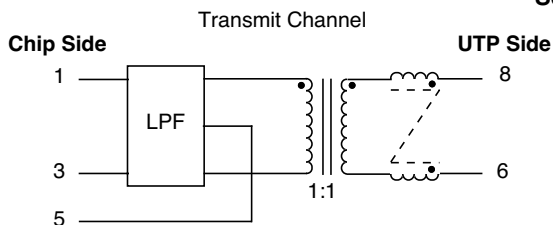
Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



- General purpose 10Base-T Filter Module
- Robust construction allows for toughest reflow processing
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Transfer Molded Package

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk ↑ (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
17/17	-1/-1	-15/-15	-7/-5	-19/-11	-30/-18	-35/-26	-45/---	-50/---	-40/---	-35

Schematic

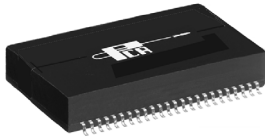


The mechanical drawing illustrates the dimensions for the PCA EPE6343G component. The top view shows a rectangular package with a width of .920 (23.36) and a length of .700 (17.78). The pin 1 indicator is located at the bottom left. The side view shows a height of .380 (9.65) and a lead height of .225 (5.71). The detail view shows the lead profile with a width of .010/.015 (.254/.381) and a thickness of .008/.012 (.203/.305). The lead pitch is .035 (.889) and the lead length is .500 (12.70). The pad layout shows a pad width of .100 (2.54) and a pad pitch of .040 (1.02). The lead angle is 0°-8°.

PCA ELECTRONICS, INC.
16799 SCHOENBORN ST.
NORTH HILLS, CA 91343

Product performance is limited to specified parameters. Data is subject to change without prior notice.
CSE6343G Rev. 1 5/6/03

TEL: (818) 892-0761
FAX: (818) 894-5791
<http://www.pca.com>



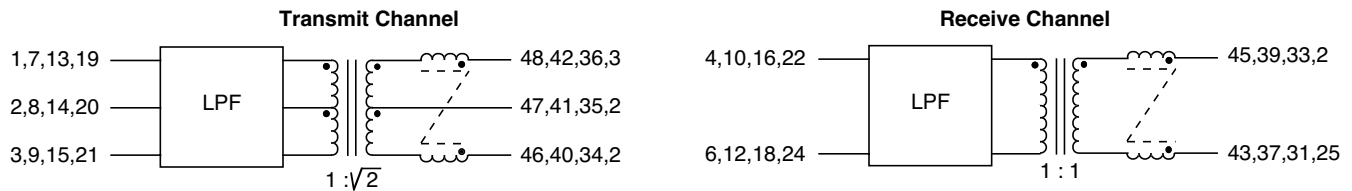
- General purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

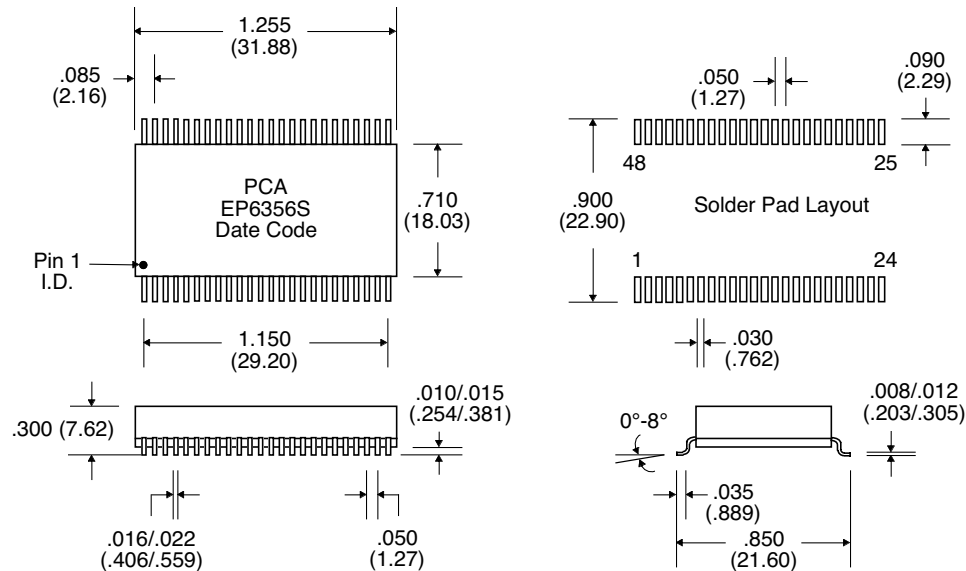
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
(Ref.)	1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
19/19	-1/-1	-15/-15	-5/-5	-10/-10	-16/-16	-40/-40	-30/-30	-25/-25	-30

- **Isolation** : Meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the Output Level Fundamental Frequency @ 5 MHz

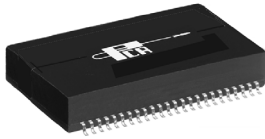
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



- General purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards

Electrical Parameters @ 25° C

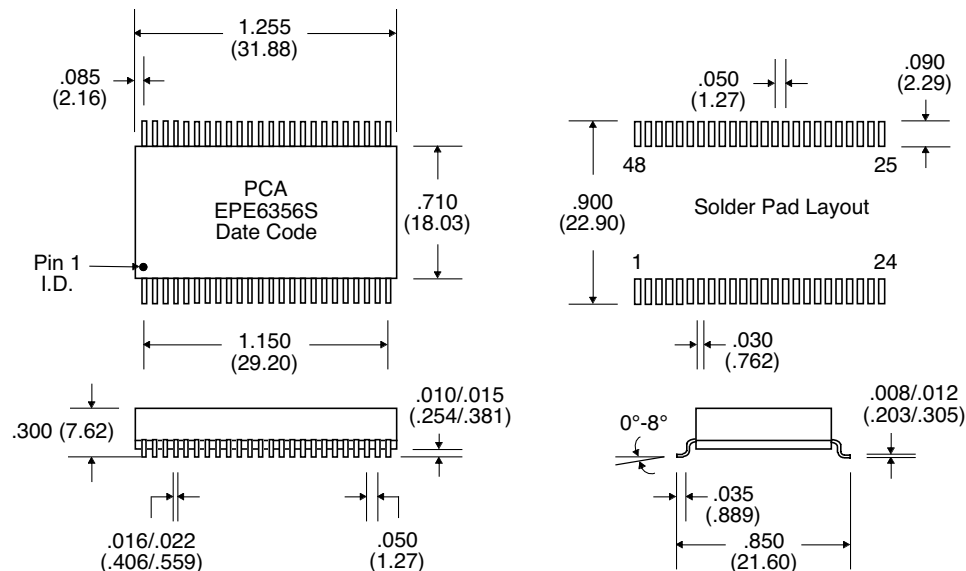
Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
(Ref.)	1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
19/19	-1/-1	-15/-15	-5/-5	-10/-10	-16/-16	-40/-40	-30/-30	-25/-25	-30

- **Isolation** : Meets or exceeds 802.3 IEEE Requirements
- **Characteristic Filter Impedance** : 100 Ω
- Referenced to the Output Level Fundamental Frequency @ 5 MHz

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



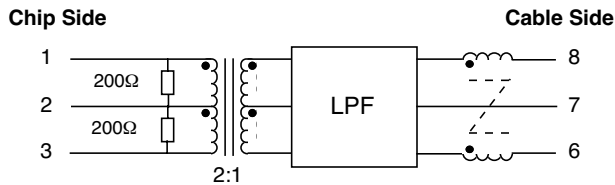
- General purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD and DIP Packages

Electrical Parameters @ 25° C

Cut-Off Frequency (MHz)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)				Crosstalk (dB Min.)
± 1.0 MHz	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv
17/17	-1/-1	-15/-15	-7/---	-15/-16	-20/-10	-30/-18	-30/-30

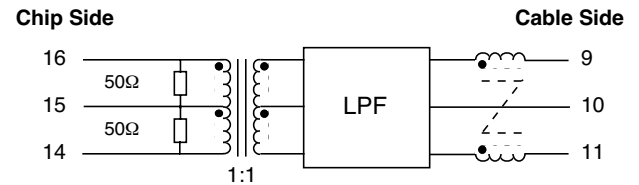
• **Isolation** : 1500VAC • **Cable Side Impedance** : 100 Ω •
 • Referenced to the filter output @ 5 MHz for filter only, excluding resistor network •

Transmit Channel

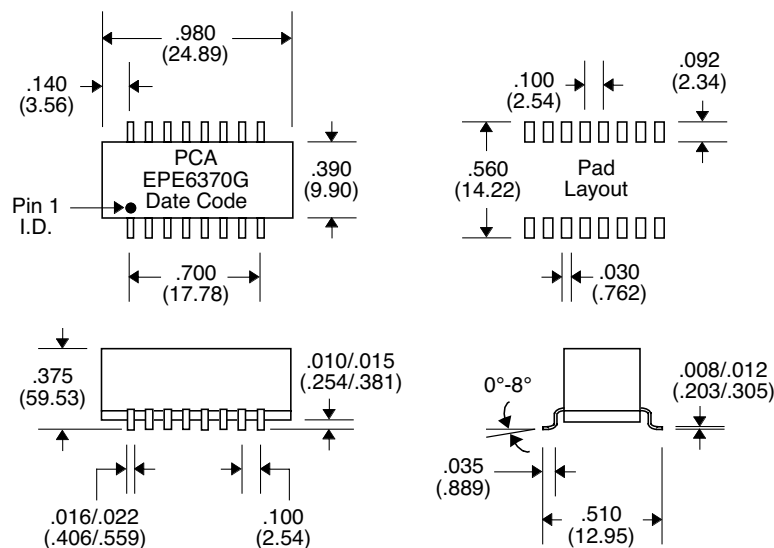


Schematic

Receive Channel



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



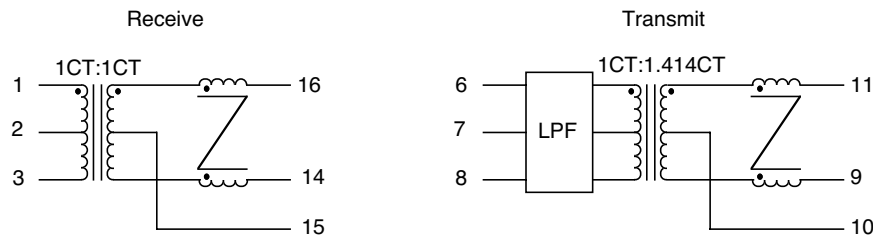
- Optimized for Level One's LX901/7/14 Transceiver Chips
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Available in SMD and DIP Packages
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

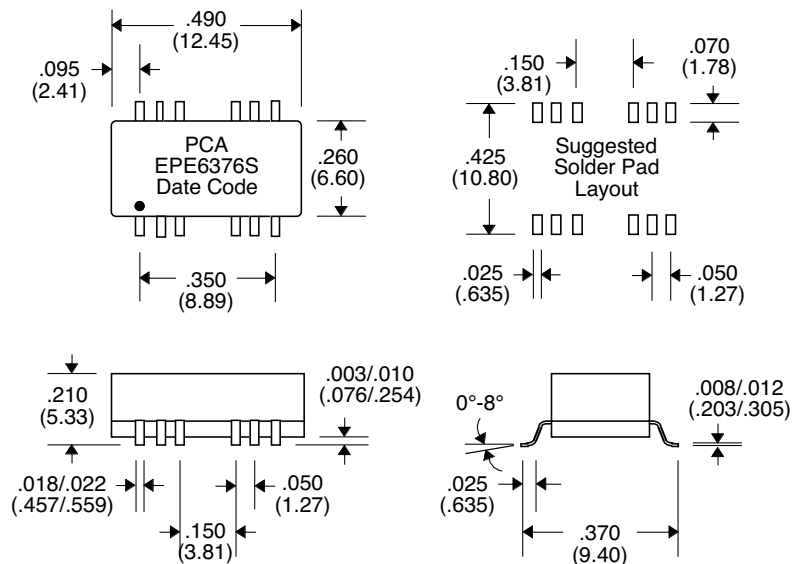
OCL (μ H Min.)	Cut-Off Frequency (MHz Typ.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)			Common Mode Rejection (dB Min.)		Crosstalk (dB Min.)
@ 100 KHz, 0.1 Vrms		1-10 MHz	5-10 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	1-30 MHz	30-100 MHz	1-10 MHz
	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit	Xmit	Xmit	Xmit/Rcv	Xmit/Rcv	
110	-17/-17	-1/-1	-15/-15	-5	-10	-16	-40/-40	-30/-30	-40

• Cable Side Impedance : 100 Ω •

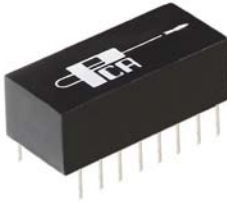
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



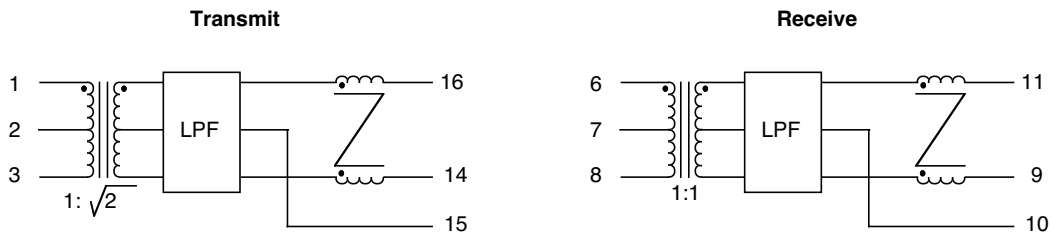
- Optimized for Ubicom's IP2022 Internet Processor
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Robust construction allows for IR/VP processes
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

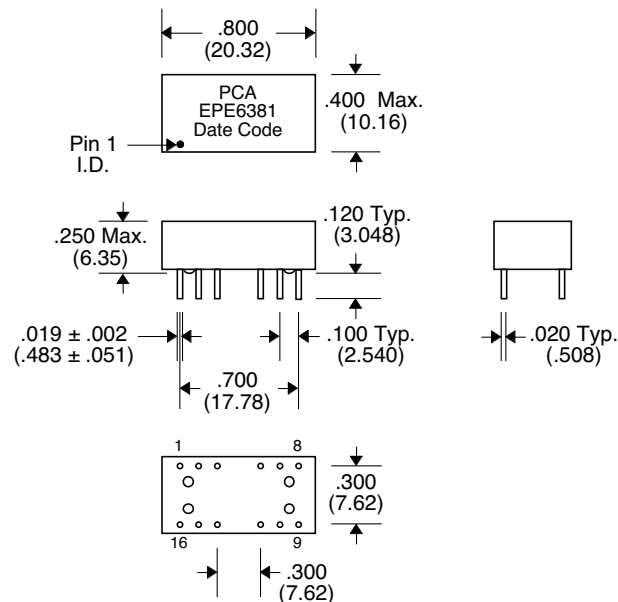
Cut-off Frequency (MHz Typ.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)	Attenuation (dB Min.)		Crosstalk (dB Min.)
	5-10 MHz	5-10 MHz	@30 MHz		1-10 MHz
			Xmit	Rcv	
17	-1	-17	-27	-18	-30

• Cable Side Impedance : 100 Ω •

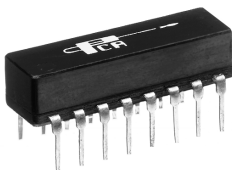
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

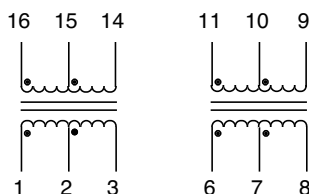


- General Purpose 10 Base-T Filter Module for Adapter Cards, MAUs, Hubs & Motherboard Applications
- Complies with or exceeds IEEE 802.3, 10 Base-T Requirements
- Available in 16 Pin DIP Package
- 2000 Vrms Isolation

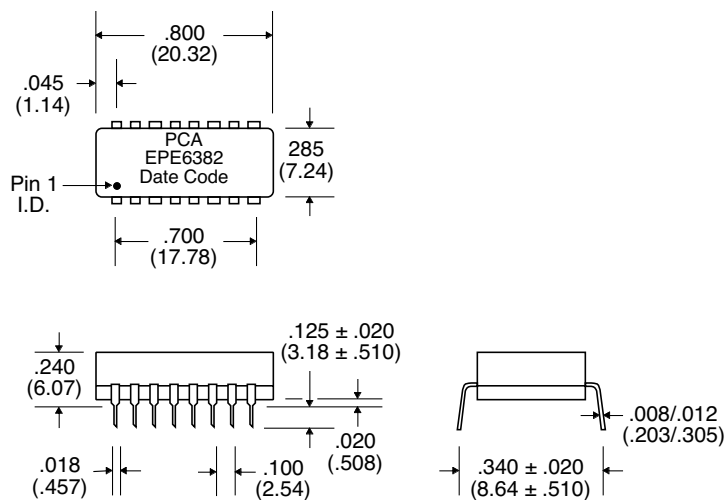
Electrical Parameters @ 25° C

Sine Wave Inductance (μ H Min.)	Interwinding Capacitance (pF Max.)	Leakage Inductance (μ H Max.)	Turns Ratio ($\pm 5\%$)		DCR (Ω Max.)
@ 100 KHz, 20 mVrms	@ 100 KHz, 20 mVrms	@ 100 KHz, 20 mVrms	Xmit	Rcv	
140	15	0.5	1CT: $\sqrt{2}$ CT	1CT: 1CT	0.4
Pins 6-8/1-3					

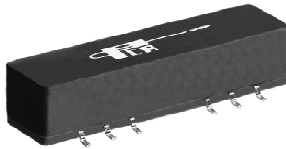
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

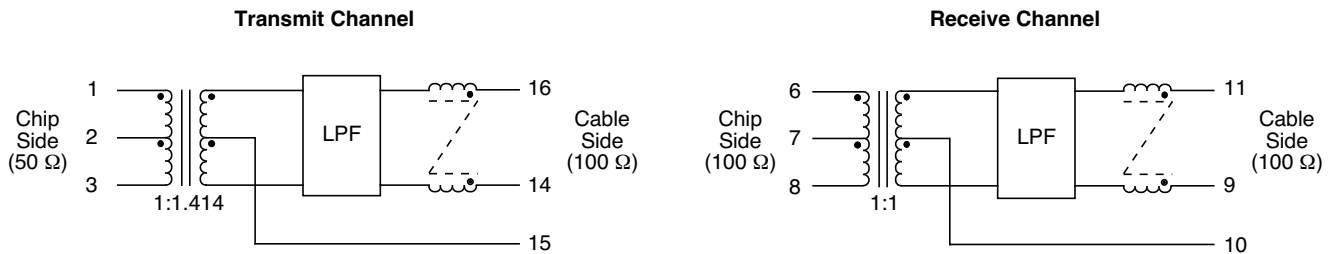


- General Purpose 10Base-T Filter Module
- Complies with or exceeds IEEE 802.3, 10Base-T Standards
- Also available in DIP Packages
- 1500 Vac Isolation

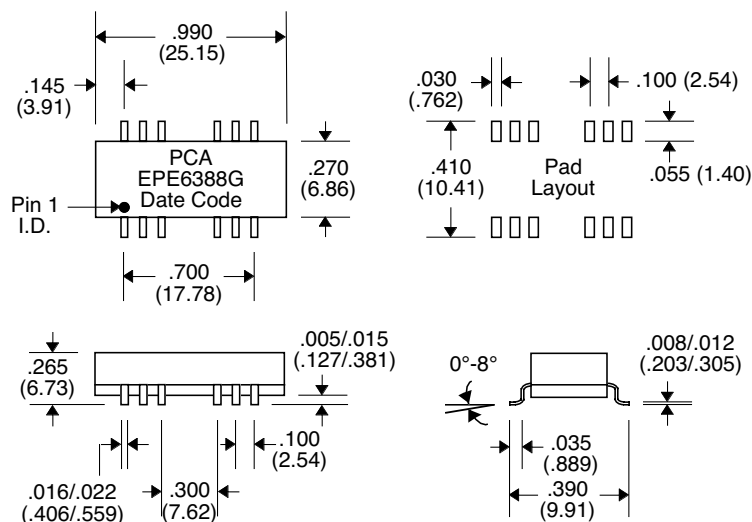
Electrical Parameters @ 25° C

Cut-Off Frequency (MHz Typ.)	Insertion Loss (dB Max.)	Return Loss (dB Typ.)	Attenuation (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
---	1-10 MHz	5-10 MHz	@ 20 MHz	@ 25 MHz	@ 30 MHz	@ 40 MHz	@ 50 MHz	@ 100 MHz	@ 200 MHz	1-10 MHz
Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
17/17	-1/-1	-17/-17	-7/-6	-19/-14	-30/-20	-35/-31	-30/-20	-25/-24	---/---	-30

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



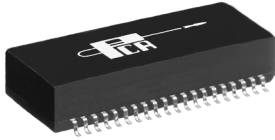
Contents

100Base-T Networking

PCA Part No.	OCL (μH)	Turns Ratio	Package Style	Length	Width	Height
EPF8015G	350 @ 100KHz, .1 Vrms	1:1/1.41:1	14 Pin PCMCIA	.810	.530	.098
EPF8017GH	350 @ 100KHz, .1 Vrms	1:1/1:1	16 Pin SMD	.990	.440	.252
EPF8023G	350 @ 100KHz, .1 Vrms	1:1/1:1	14 Pin PCMCIA	.810	.530	.098
EPF8024G	350 @ 100KHz, .1 Vrms	1:1/1 .41:1	16 Pin SMD	.990	.400	.252
EPF8025G	350 @ 100KHz, .1 Vrms	1:1/2:1	16 Pin SMD	.800	.285	.243
EPF8029G	350 @ 100KHz, .1 Vrms	1:1/1:1	14 Pin PCMCIA	.790	.510	.088
EPF8034S	350 @ 100KHz, .1 Vrms	1:1/1CT:1CT	40 Pin SOIC	1.130	.490	.370
EPF8049S	350 @ 100KHz, .1 Vrms	1:1/1:CT:1CT	40 Pin SOIC	1.130	.490	.255
EPF8066SM	350 @ 100KHz, .1 Vrms	1:1/1CT:1CT	40 Pin SOIC	1.130	.490	.255
EPF8069S	350 @ 100KHz, .1 Vrms	1:1	14 Pin PCMCIA	.500	.280	.084
EPF8092G	350 @ 100KHz, .1 Vrms	1:1/1:1	16 Pin SMD	.990	.400	.243
EPF8095G	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1.41CT	16 Pin SMD	.990	.400	.243
EPF8105S	350 @ 100KHz, .1 Vrms	1:1/2CT:1CT	16 Pin SMD	1.130	.490	.255
EPF8107G	350 @ 100KHz, .1 Vrms	1:CT:1CT	16 Pin SMD	.980	.390	.247
EPF8115G	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SMD	.990	.400	.980
EPF8123S	350 @ 100KHz, .1 Vrms	1:1/1CT:1CT	40 Pin SOIC	1.130	.490	.270
EPF8123SP	350 @ 100KHz, .1 Vrms	1CT:1CT/1:1	40 Pin SOIC	1.120	.480	.370
EPF8124S	350 @ 100KHz, .1 Vrms	1CT:1CT/1:1	40 Pin SOIC	1.120	.480	.260
EPF8125S	350 @ 100KHz, .1 Vrms	1:1/1:1	16 Pin SOIC/PCMCIA	.570	.570	.080
EPF8130S	350 @ 100KHz, .1 Vrms	1:1/1CT:1CT	40 Pin SOIC	1.130	.490	.270
EPF8143S	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SMD	.500	.280	.200
EPF8143SE	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SMD	.500	.280	.200
EPF8181AS	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SOIC/PCMCIA	.500	.280	.084
EPF8181S	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SOIC/PCMCIA	.500	.280	.084
EPF8183S	350 @ 100KHz, .1 Vrms	1CT:1CT	16 Pin SMD	1.12	.480	.260
EPF8183SP	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	40 Pin SOIC	1.120	.480	.370
EPF8185SL	350 @ 100KHz, .1 Vrms	1CT:1:1/1CT:1:1	20 Pin SOIC	.610	.570	.080
EPF8186AG	350 @ 100KHz, .1 Vrms	1:1/1:1	16 Pin SMD	.990	.400	.252
EPF8188G	350 @ 100KHz, .1 Vrms	1:1/1:1	16 Pin SMD	.990	.400	.252
EPF8195F1	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SMD	.530	.480	.240
EPF8196F2	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin SMD	.580	.460	.190
EPF8209S	350 @ 100KHz, .1 Vrms	1CT:1CT/1CT:1CT	16 Pin PCMCIA/SOIC	.500	.280	.084
EPF8223S	350 @ 100KHz, .1 Vrms	1:1/1.41:1	16 Pin SMD	1.130	.490	.270
EPF8229F	350 @ 100KHz, .1 Vrms	1CT:1CT	16 Pin SMD	.540	.600	.225

10/100Base-TX Module for Quad-Port Applications

EPF8124S



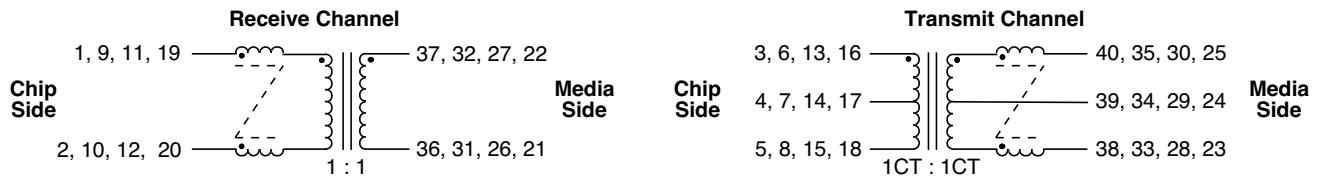
- Recommended for use with SEEQ 84220 Chip
- Designed for Dual Stacked RJ-45 Connector
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

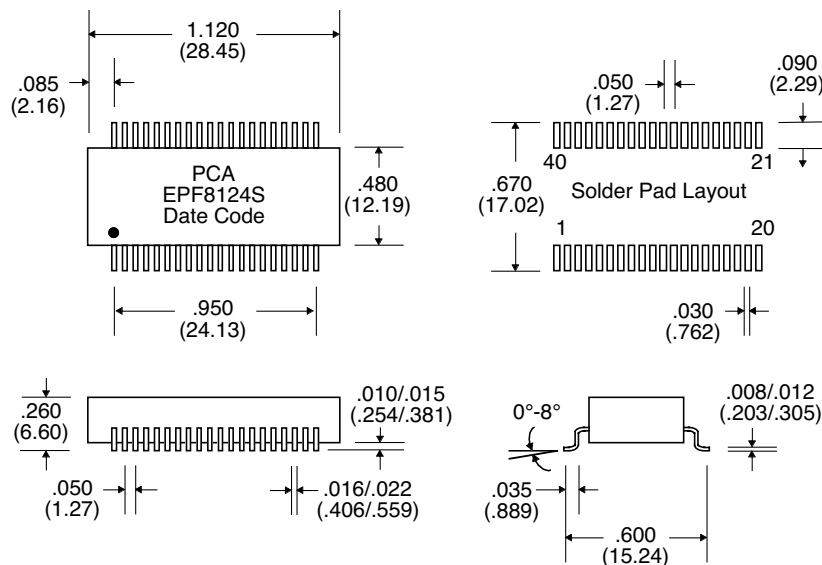
OCCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	1-100 MHz
Media Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-20	-20/-20	-20/-10	-10/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications EPF8015G



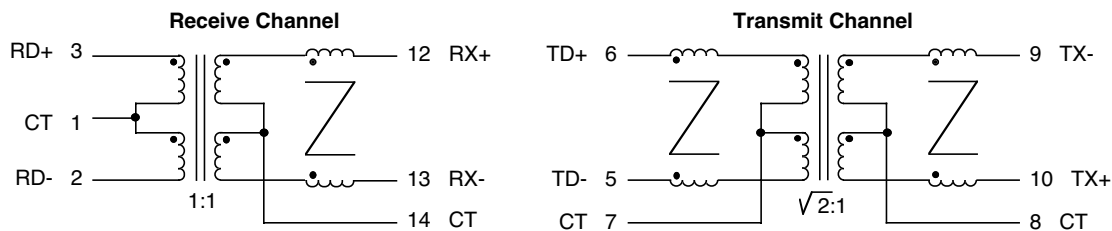
- Optimized for QSI6611/6612 PHY/MAC
- Guaranteed to operate with 8 mA DC Bias at 70°C on Cable Side
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

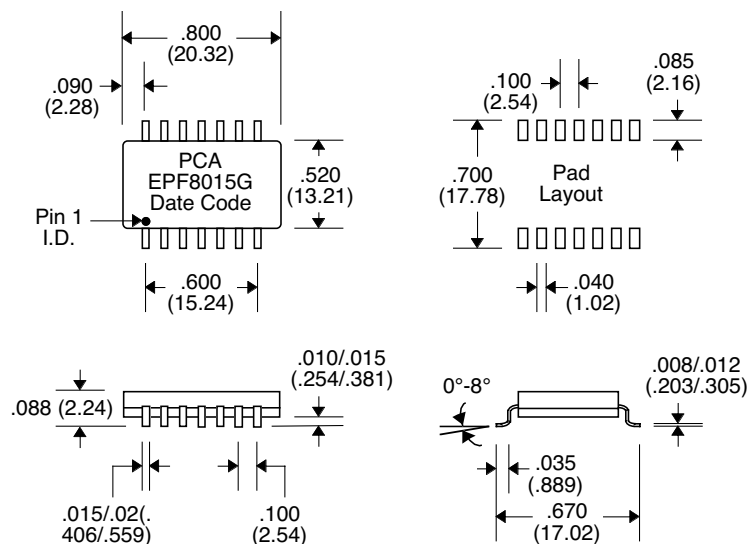
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.) Between Channels
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1.5/-1	-2/-2	-4/-3	-18/-18	-12/-12	-8/-10	-38/-38	-30/-25	-20/-15	-40

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic

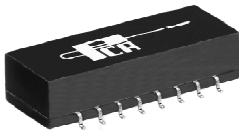


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation EPF8017GH



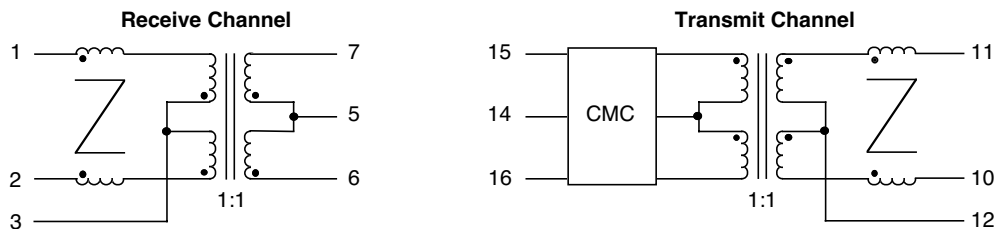
- Optimized for use with DP83840A/DP83223 Chip Set
- Recommended for use with ICS 1890 Series & SSI578Q2120 (when connected per appropriate schematic)
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C

Electrical Parameters @ 25° C

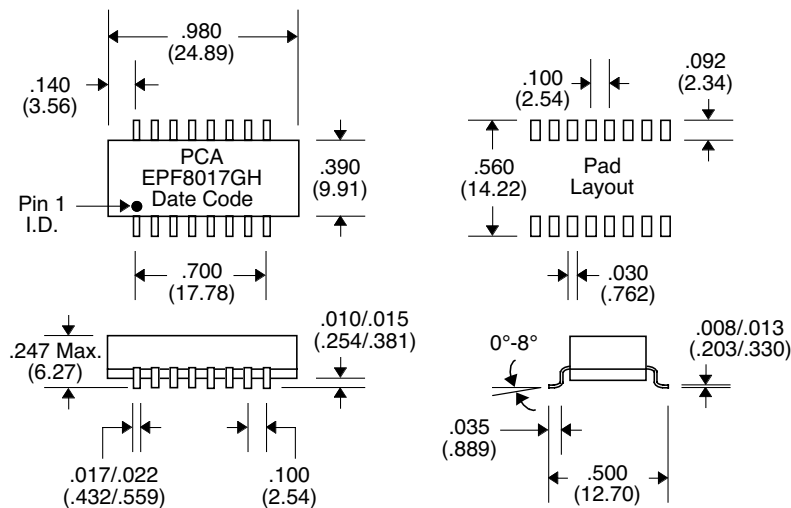
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-2/-2	-3.5/-3.5	-18/-18	-12/-12	-10/-10	-40/-40	-35/-30	-10/-10	-35	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications EPF8023G



- Optimized for DP83840A/DP83223 Chip Set
- Recommended for use with ICS 1890 Series and SS578Q2120 (when connected per appropriate schematic)
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C

Electrical Parameters @ 25° C

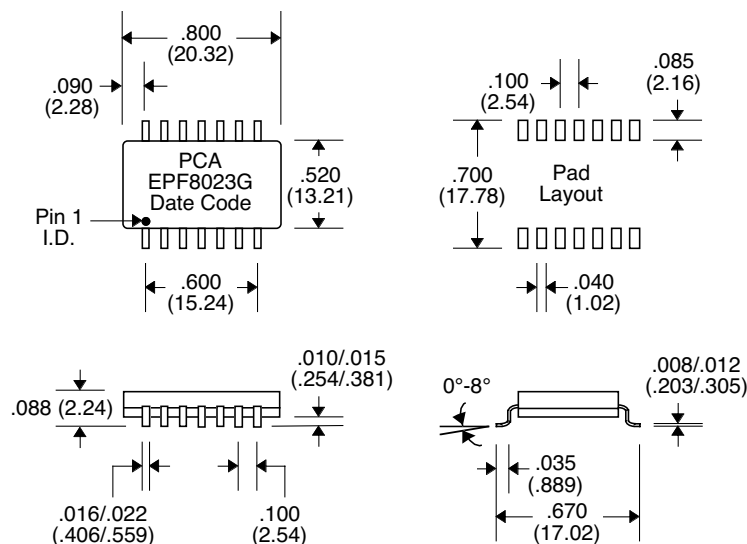
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.) Between Channels	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-1/-1	-3.5/-3	-20/-20	-17/-17	-10/-10	-38/-38	-38/-38	-10/-10	-38	-38

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



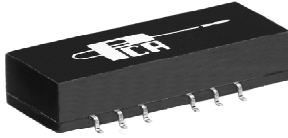
Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for NIC/HUB Applications

EPF8024G



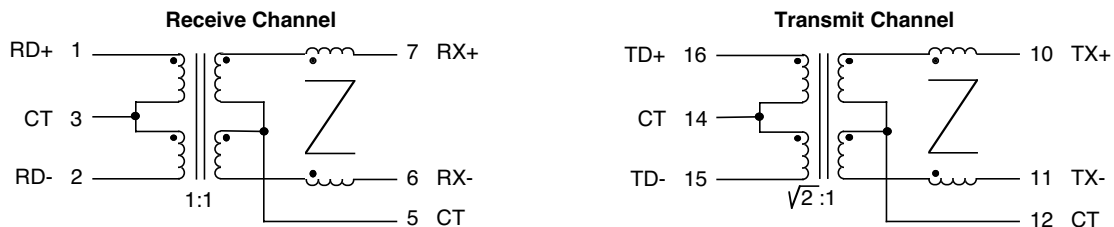
- Optimized for QSI6611/6612 PHY/MAC
- Guaranteed to operate with 8 mA DC Bias at 70°C on Cable Side
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

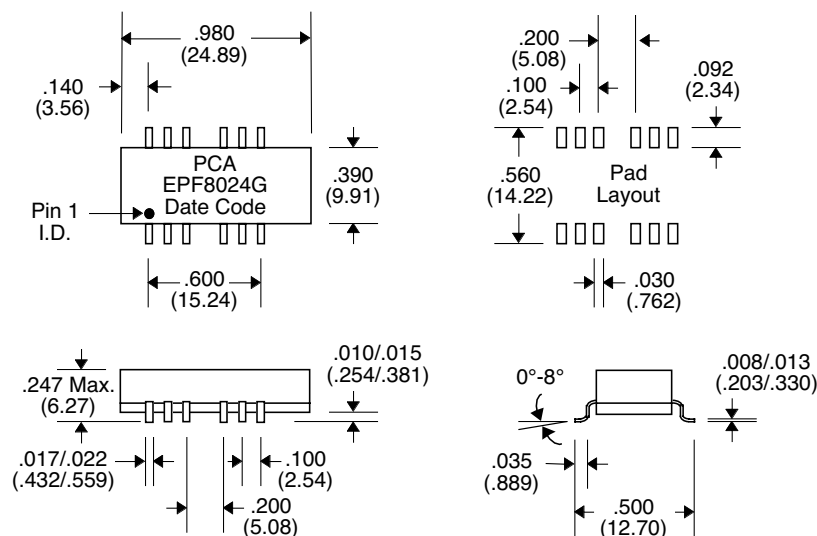
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-2/-2	-3.5/-3	-18/-18	-12/-12	-10/-10	-40/-40	-30/-30	-10/-10	-35	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



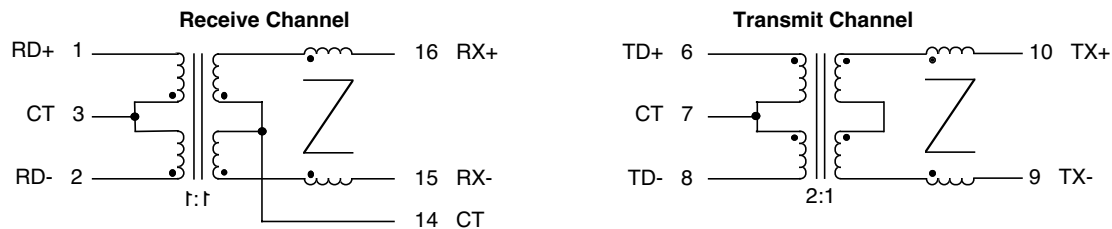
- Recommended for use with SEEQ 80220
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C on Cable Side

Electrical Parameters @ 25° C

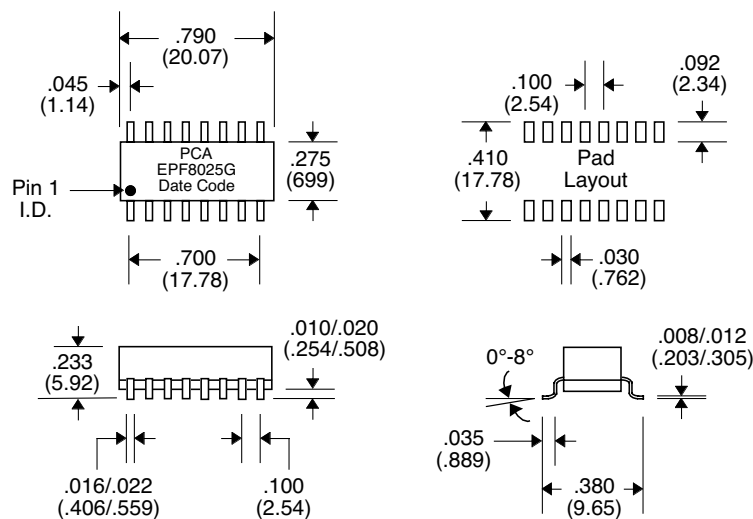
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	0.1-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-1/-1	-3.5/-3	-20/-20	-10/-10	-10/-10	-40/-40	-30/-30	-10/-10	-40	-40

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. • Crosstalk : Between Channels •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications EPF8029G



- Recommended for use with SSI78Q2120
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C
Low profile, fully integrated with two channels

Electrical Parameters @ 25° C

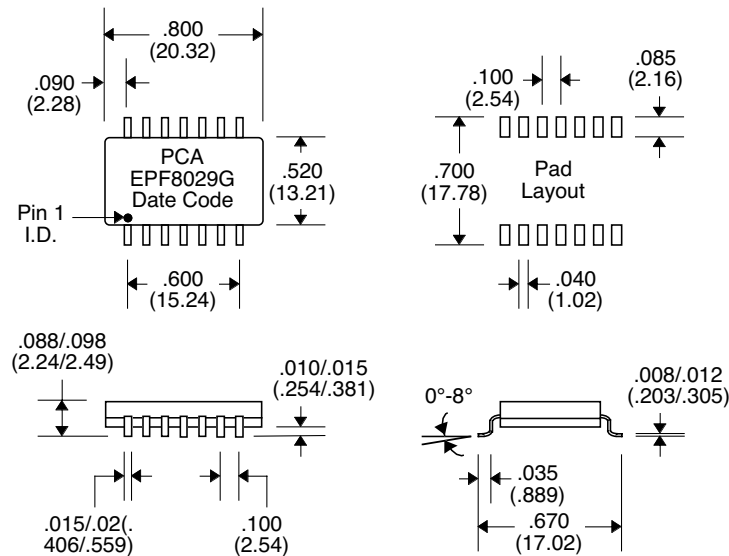
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.) Between Channels	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-1/-1	-3.5/-3	-18/-18	-12/-12	-10/-10	-38/-38	-30/-30	-10/-10	-40	-40

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



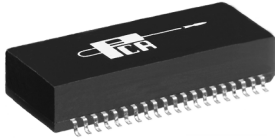
Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Quad-Port Applications

EPF8034S



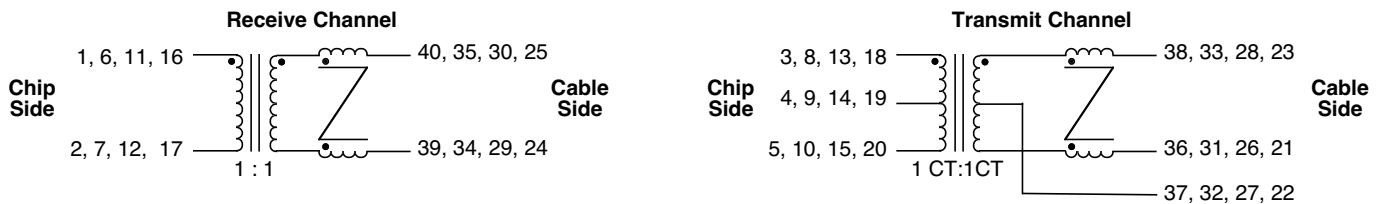
- Optimized for DP83840A/Twister Combination
- Recommended for use with ICS1890 series, SSI TSC78Q2120 chips
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C

Electrical Parameters @ 25° C

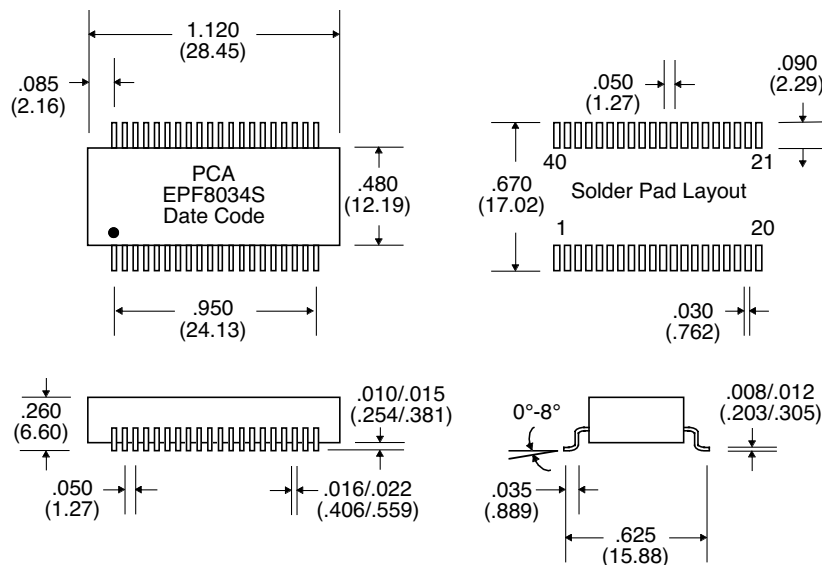
OCL (@ 70°C)	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	0.1-100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	0.1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-25	-25/-20	-20/-10	-15/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic

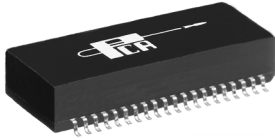


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Multi-Port Applications EPF8049S



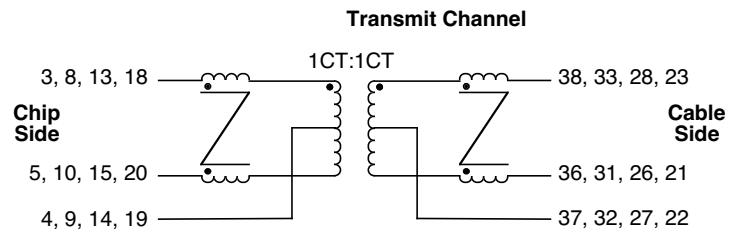
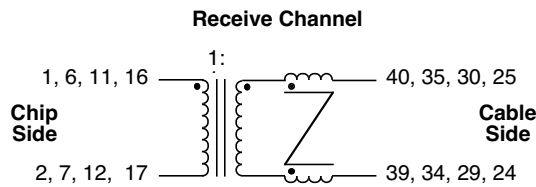
- Optimized for ICS 1890 & SSI 78Q2120 Chips
- Recommended for Broadcom BCM5208 10/100 Solution
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C

Electrical Parameters @ 25° C

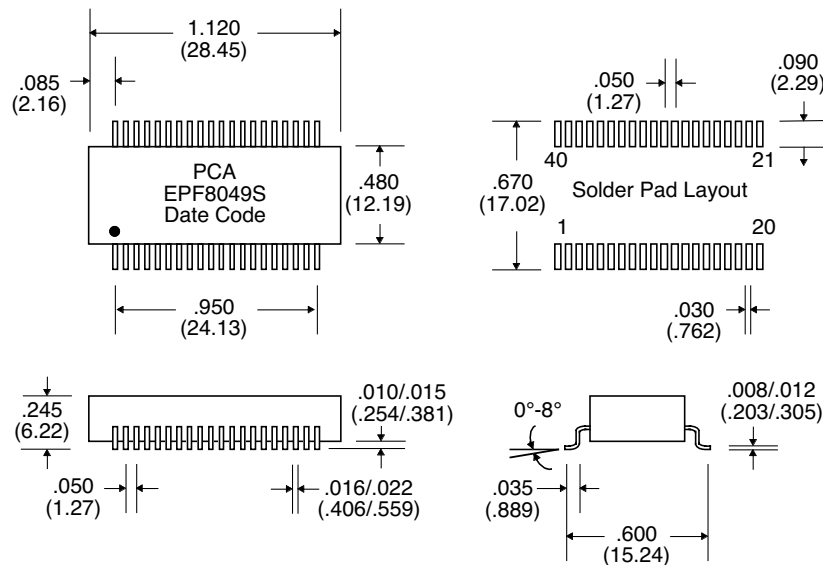
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	0.1-80 MHz	100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	0.1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-28	-25/-20	-20/-10	-15/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic

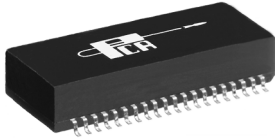


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Multi-Port Applications EPF8066SM



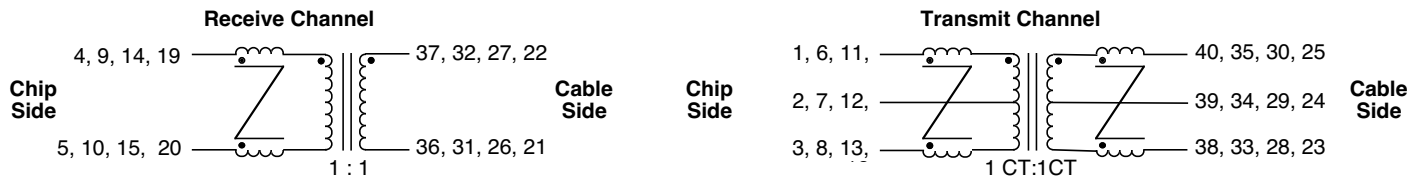
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

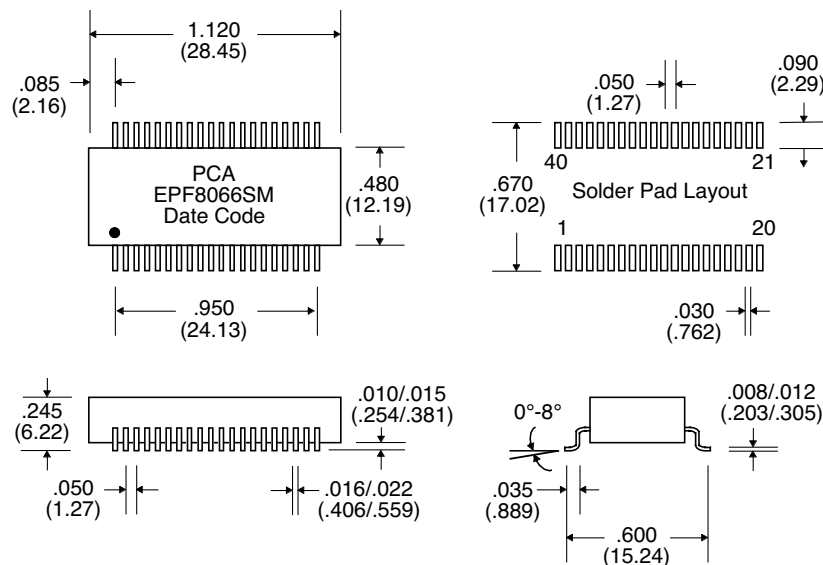
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	0.1-80 MHz	100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	0.1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-25	-25/-20	-20/-10	-15/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications

EPF8069S



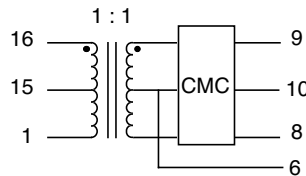
- Recommended for use with SSI78Q2120
- Low profile (PCMCIA), 16 pin SOIC
- Guaranteed to operate with 8 mA DC bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

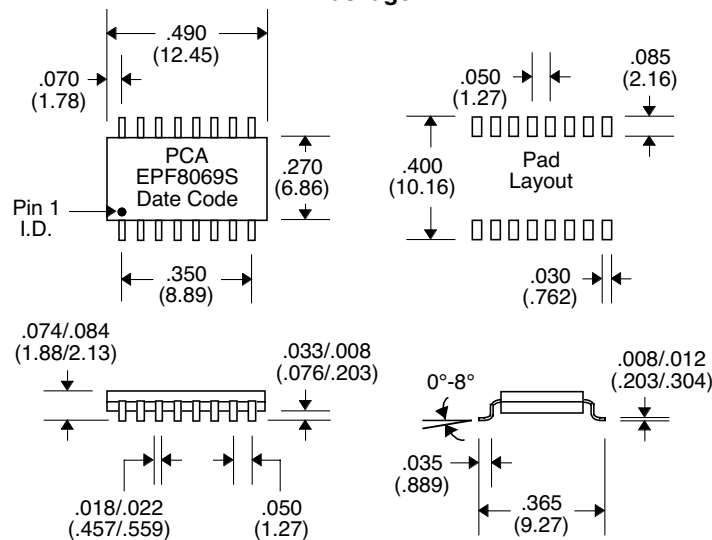
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-100 MHz	100-200 MHz
350μH Cable Side	-1	-1	-2	-18	-12	-10	-30	-10

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

10/100Base-TX Interface Module for NIC/HUB Applications EPF8092G



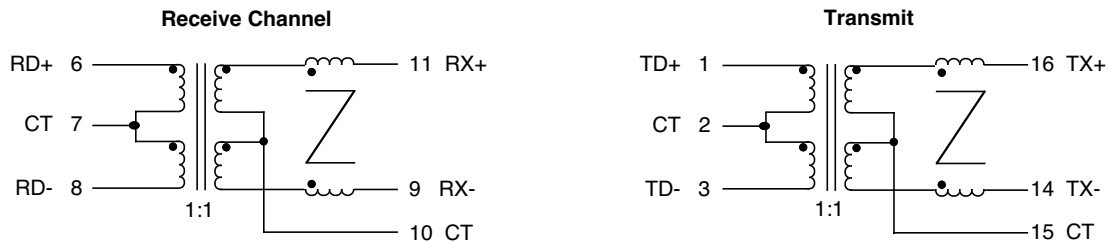
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C

Electrical Parameters @ 25° C

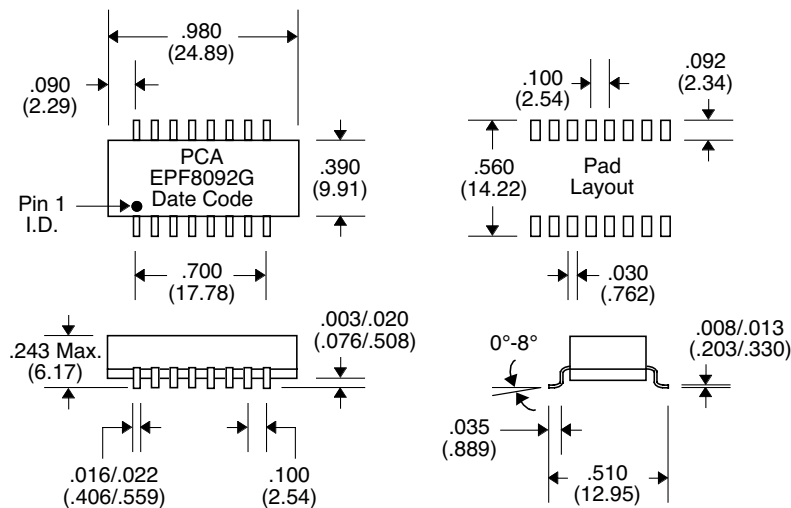
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-2/-2	-3.5/-3	-18/-18	-12/-12	-10/-10	-40/-40	-30/-30	-10/-10	-35	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation

EPF8095G



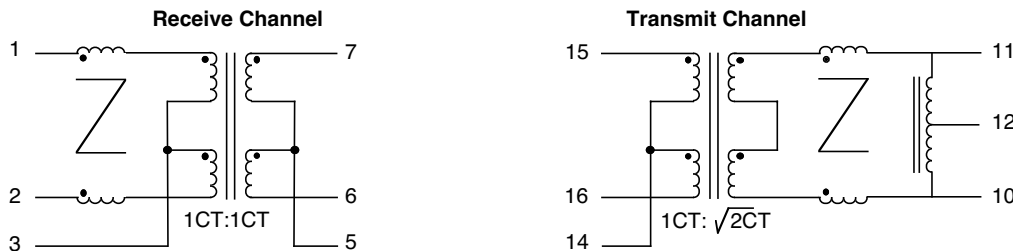
- Optimized for AMD AM79C973 Chip
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Robust construction to meet IR/VP soldering processes
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

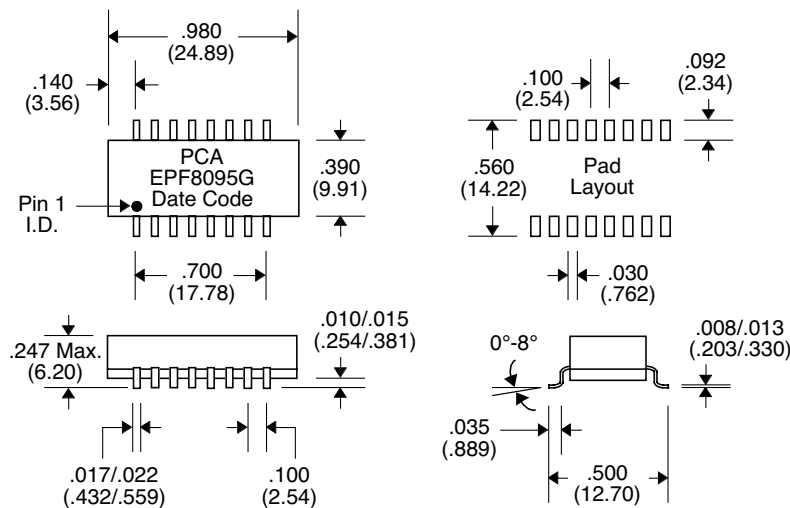
OCL (@ 70°C)	Insertion Loss (dB Max.)	Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	1-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-100 MHz	100-500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-18/-18	-12/-12	-10/-10	-40/-40	-35/-30	-10/-10	-35	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. • Crosstalk : Between Channels •

Schematic



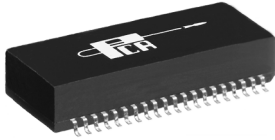
Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Multi-Port Applications

EPF8105S



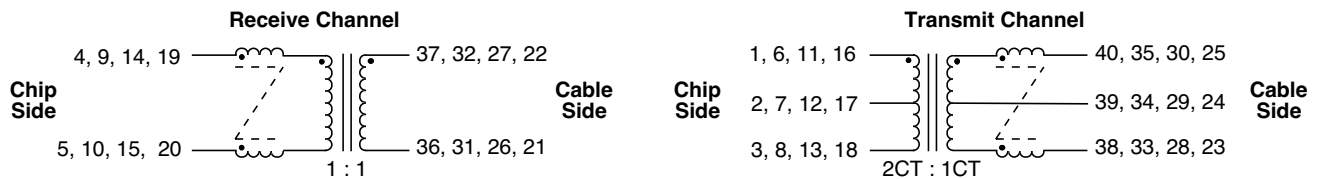
- Recommended for use with Level One LXT974 Chip
- For use with Transceiver requiring 2:1 Transmit Turn Ratio
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

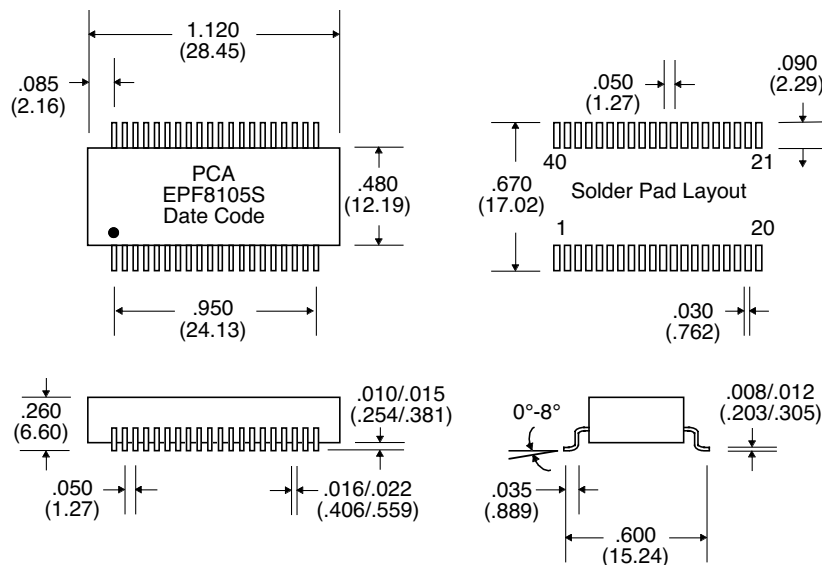
OCL (@ 70°C)	Insertion Loss (dB Max.)			Return Loss (dB Min.)			CMR (dB Min.)		Diff. to CMR (dB Min.)		Crosstalk (dB Min.)	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-60 MHz	80 MHz	100 MHz	1-30 MHz	60 MHz	80 MHz	30-100 MHz	200 MHz	1-60 MHz	200 MHz	60 MHz	100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-2/-1	-2.5/-1	-18/-18	-12/-12	-10/-10	-30/-20	-15/-15	-40/-25	-30/15	-40	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation

EPF8107G



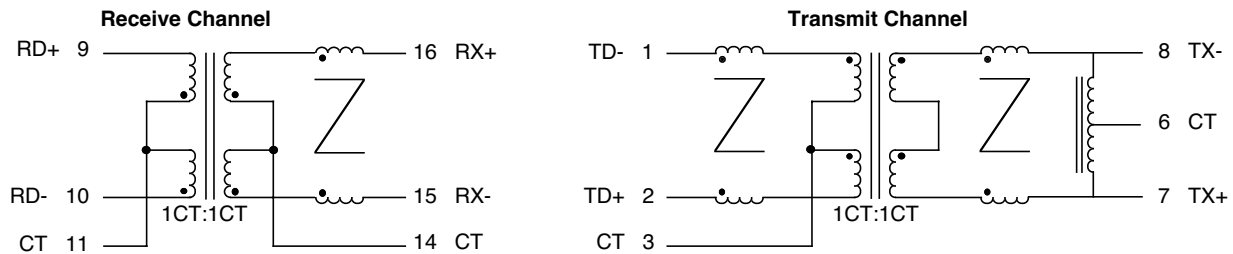
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Robust construction to meet IR/VP soldering processes
- Complies with or exceeds IEEE 802.3, 10BT/100BX Standards

Electrical Parameters @ 25° C

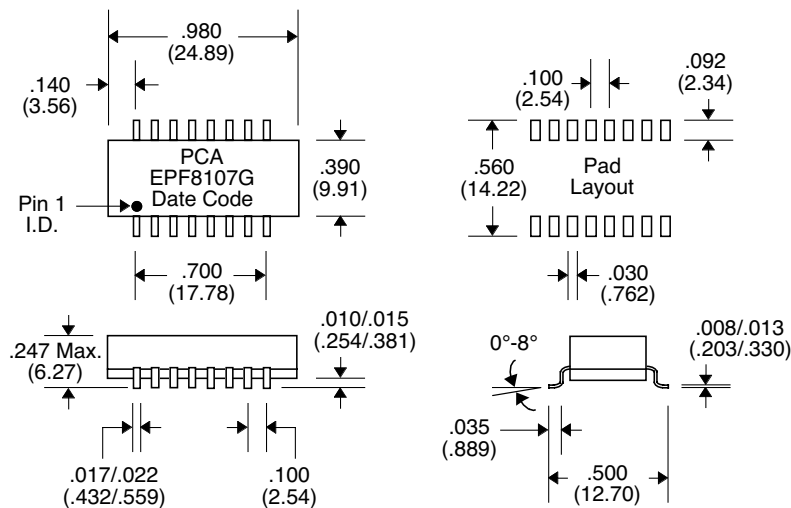
OCL @ 70°C	Insertion Loss (dB Max.)	Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	1-30 MHz	30-60 MHz	80-100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-18/-18	-12/-12	-10/-10	-40/-40	-35/-30	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. • Crosstalk : Between Channels •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation

EPF8115G & EPF8115G-RC



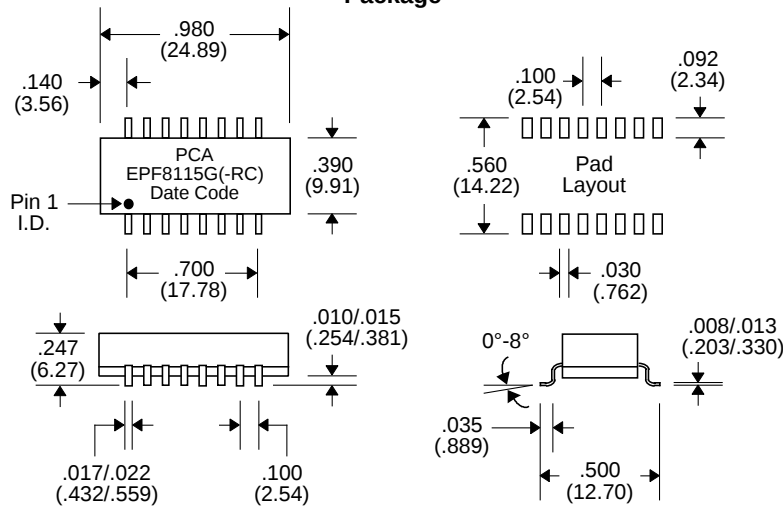
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Robust construction to meet IR/VP soldering processes
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- RoHS Compliant

Electrical Parameters @ 25° C

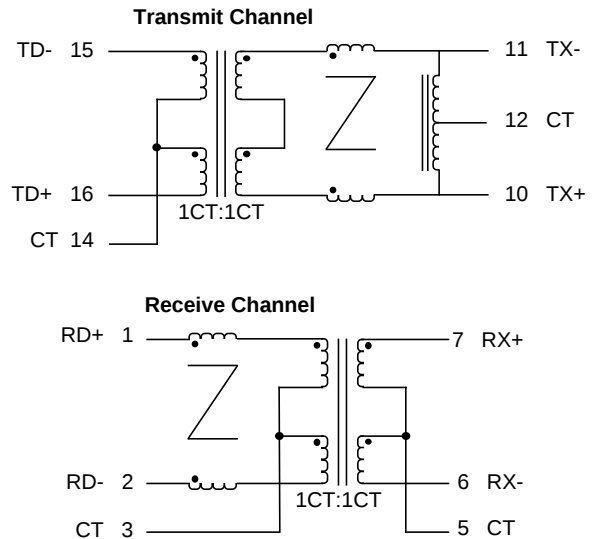
OCCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)				Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-80 MHz	80-100 MHz	30-100 MHz	200 MHz	300-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-14/-14	-12/-12	-10/-10	-35/-35	-15/-20	-10/-10	-50

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Package



Schematic

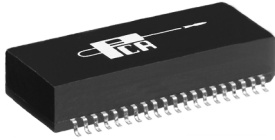


Notes :	EPF8115G	EPF8115G-RC
1. Assembly Process (Solder Composition)	SnPb	Pb-Free + (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)	MSL = 3 (168 Hours, $\leq 30^\circ\text{C}/60\%\text{RH}$)	MSL = 4 (72 Hours, $\leq 30^\circ\text{C}/60\%\text{RH}$)
4. Weight	1.85 grams	1.85 grams
5. Packaging Information (*Add "TR" to end of part number when placing order)	(Tube) 19 pieces/tube	19 pieces/tube
	(Tape & Reel) 550 pieces/13" reel (*EPF8115G-TR)	550 pieces/13" reel (*EPF8115G-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Quad-Port Applications

EPF8123S



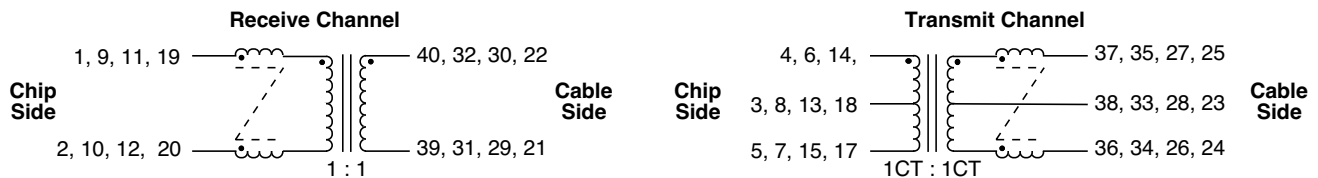
- Recommended for use with SEEQ 84220
- Designed for non-stacked RJ-45 connector
- Significantly improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

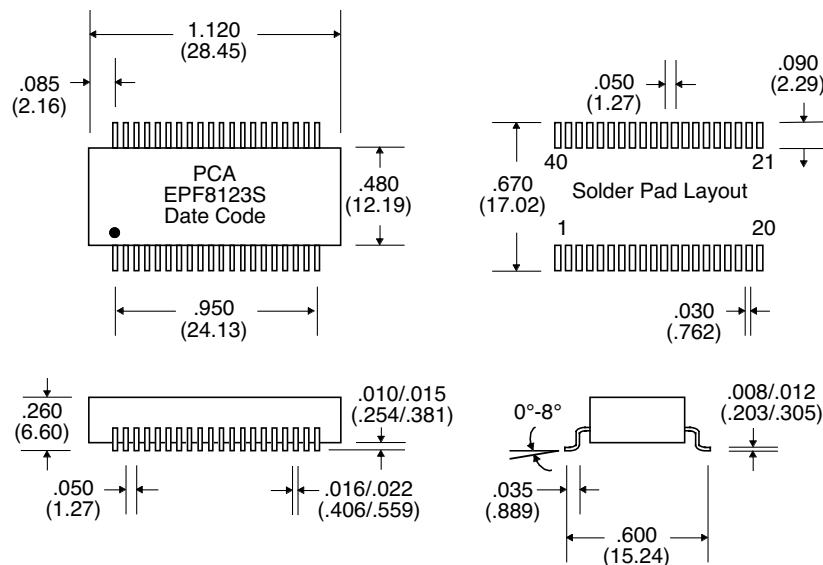
OCL (@ 70°C)	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-20	-20/-15	-20/-10	-10/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications EPF8125S

- Recommended for use with SSI 78Q2120 chips
- Low profile, fully integrated with two channels
- Guaranteed to operate with 8 mA DC bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

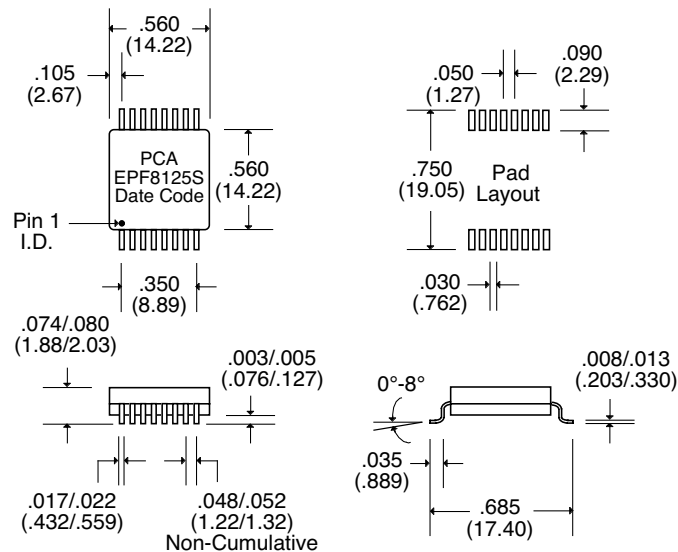
OCL @ 70°C	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.) Between Channels	
100 KHz, 0.1 Vrms 8 mA DC Bias	0.1-80 MHz	100 MHz	150 MHz	30 MHz	60 MHz	100 MHz	1-30 MHz	100 MHz	500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μH	-1/-1	-1/-1	-3.5/-3.5	-18/-18	-12/-12	-10/-10	-30/-30	-25/-25	-10/-10	-40	-40

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package

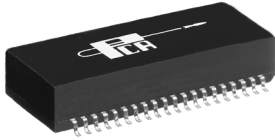


Coplanarity within .003 Max.

Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Multi-Port Applications

EPF8130S



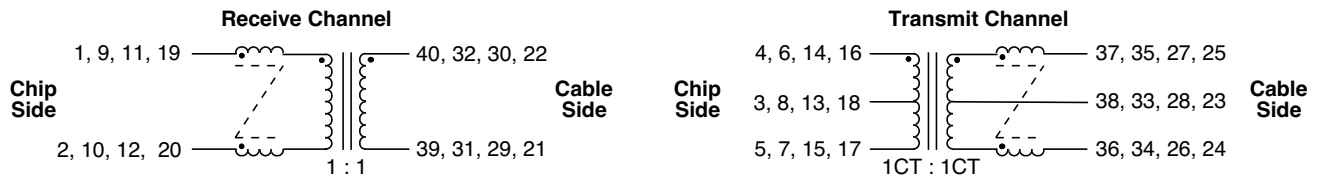
- Recommended for use with Broadcom 5208 Chip
- Significantly Improved Common Mode Attenuation
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Transfer Molded Part

Electrical Parameters @ 25° C

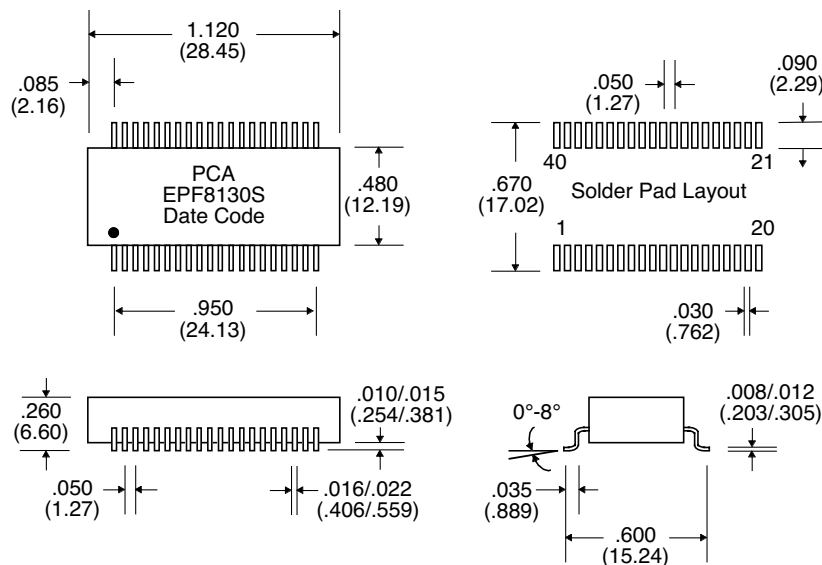
OCL @ 70°C	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-20	-20/-15	-20/-10	-15/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation

EPF8143S & EPF8143S-RC



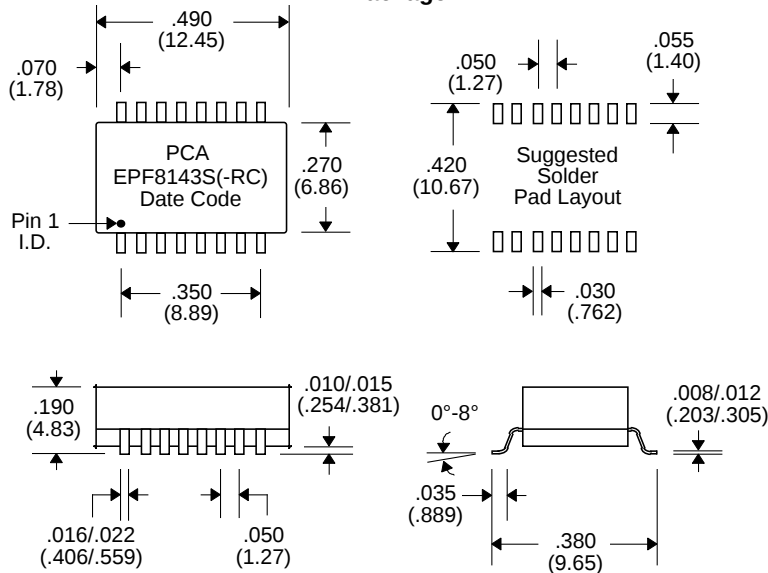
- Recommended for Enable EL40C331, Broadcom BCM5201, BCM5202 & Level One LXT970
- Designed to operate from 0°C to +70°C @ 8 mA DC Bias
- Complies with or exceeds IEEE 802.3 & ANSI X3.263 Standards
- Peak Solder Rating (see Note 2)
- RoHS Compliant

Electrical Parameters @ 25° C

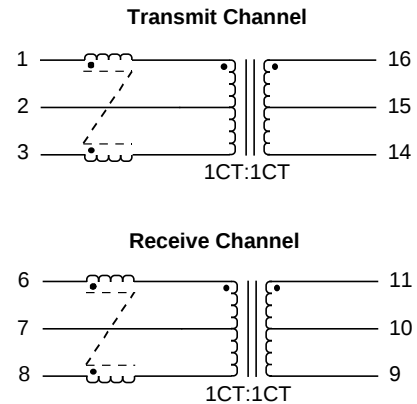
OCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	.1-100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-100 MHz
	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-40/-40	-35/-30	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Package



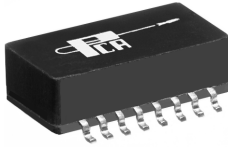
Schematic



Notes :	EPF8143S	EPF8143S-RC
1. Assembly Process (Solder Composition)	SnPb	Pb-Free + (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)	MSL = 3 (168 Hours, $\leq 30^\circ\text{C}/60\%\text{RH}$)	MSL = 4 (72 Hours, $\leq 30^\circ\text{C}/60\%\text{RH}$)
4. Weight	0.912 gram	0.912 gram
5. Packaging Information (*Add "TR" to end of part number when placing order)	(Tube) 40 pieces/tube	40 pieces/tube
	(Tape & Reel) 650 pieces/13" reel (*EPF8143S-TR)	650 pieces/13" reel (*EPF8143S-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation EPF8143SE



- Recommended to Enable 40C331, Broadcom BCM5201, BCM5202 & Level ONE LXT970 when connected per appropriate schematic
- Designed to operate from -40°C to +85°C @ 8 mA DC Bias
- Complies with or exceeds IEEE 802.3 & ANSI X3.263 Standards

Electrical Parameters @ 25° C

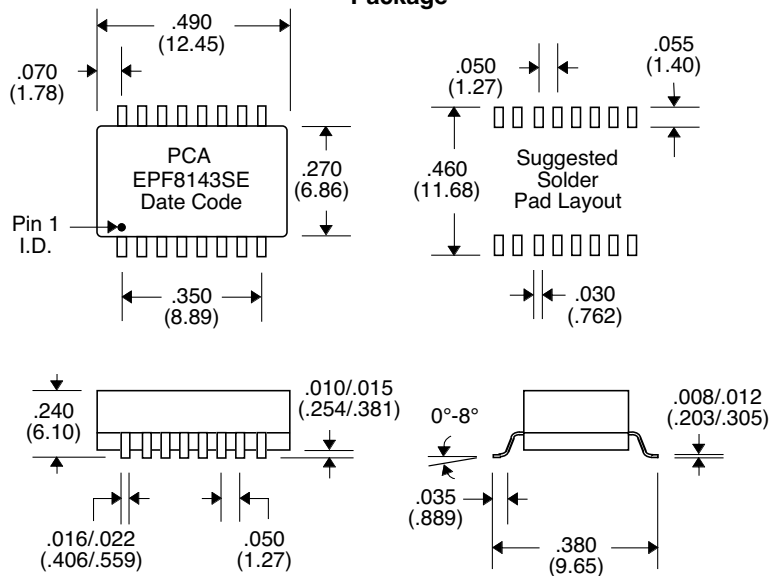
OCL (μ H Min.)	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	0.1-100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-100 MHz
Pins 1-3/6-8	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-40/-40	-35/-30	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface PCMCIA Module EPF8181AS

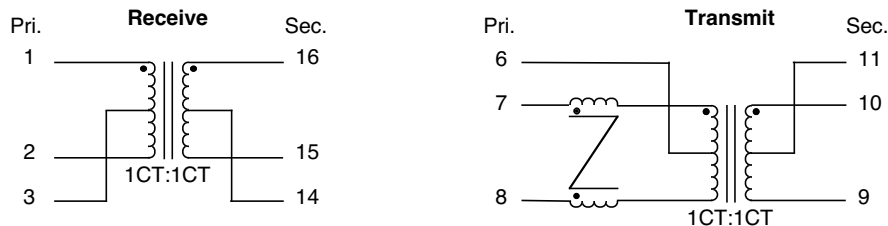


- 1500 Vrms Isolation
- Robust design allows for toughest soldering processes
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

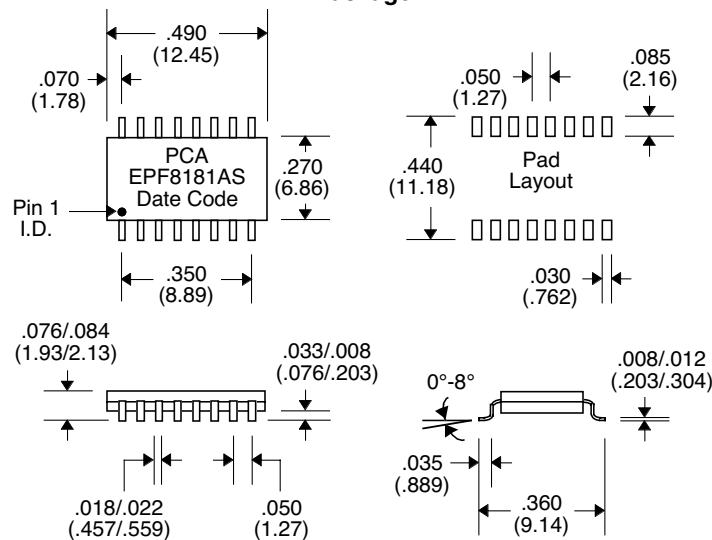
Electrical Parameters @ 25° C

OCL (μ H Min.)	Interwinding Capacitance (pF Max.)	Primary Leakage Inductance (μ H Max.)	Return Loss (dB Min.)			Primary DCR (Ω Max.)	
100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	1-30	30-60	60-80		
Xmit & Rcv		Xmit & Rcv				Xmit	Rcv
350 @ Pins 16-15 & 10-9	25	0.3	-18	-14	-10	1.5	1.0

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface PCMCIA Module EPF8181S

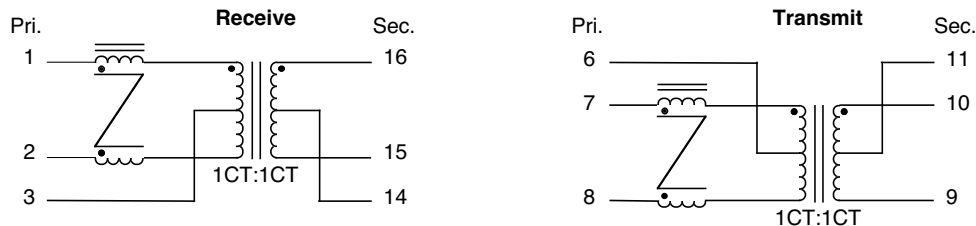


- 1500 Vrms Isolation
- Robust design allows for toughest soldering processes
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

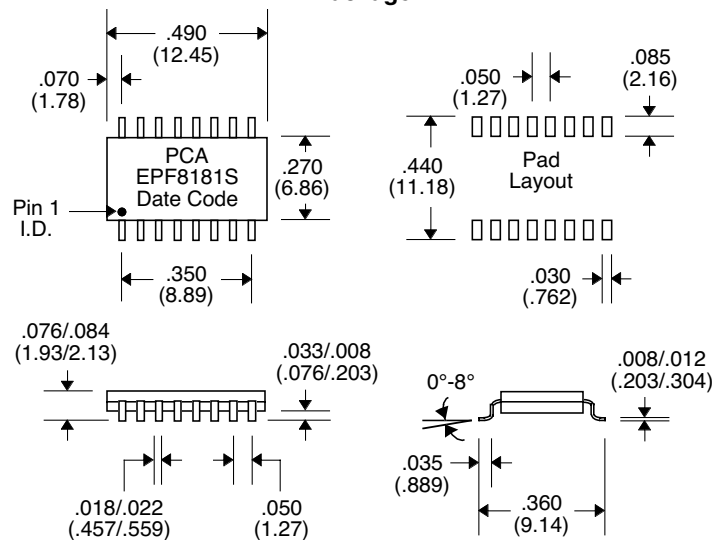
Electrical Parameters @ 25° C

OCL (μ H Min.)	Interwinding Capacitance (pF Max.)	Primary Leakage Inductance (μ H Max.)	Return Loss (dB Min.)			Primary DCR (Ω Max.)	
100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	1-30	30-60	60-80		
Xmit & Rcv		Xmit & Rcv				Xmit	Rcv
350 @ Pins 16-15 & 10-9	12	0.3	-18	-14	-10	0.9	0.9

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Quad Module

EPF8183S & EPF8183S-RC



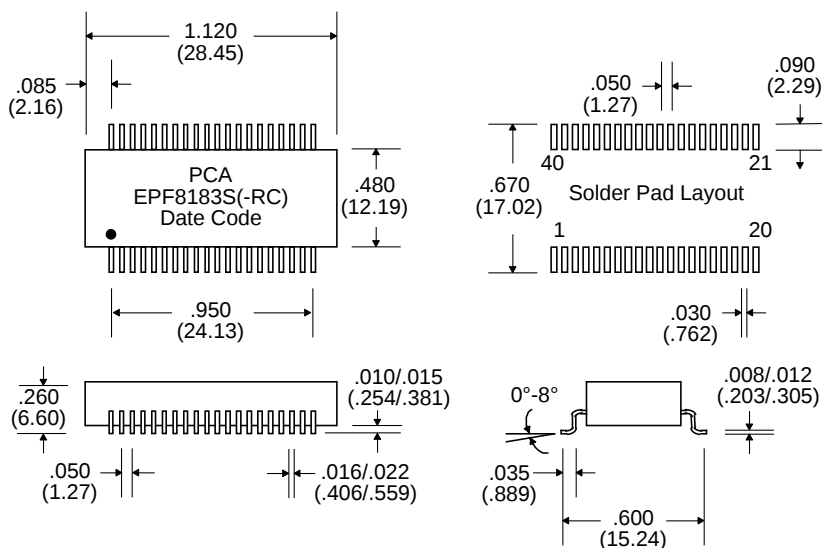
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Add “-RC” after part number for RoHS Compliant

Electrical Parameters @ 25° C

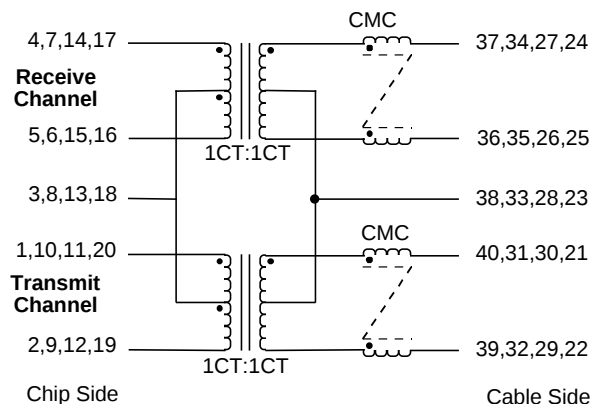
OCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Common to Diff. Reject. (dB Min.)	Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	150 MHz	30 MHz	30-60 MHz	60-80 MHz	30 MHz	100 MHz	200 MHz	300-500 MHz	1-100 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μH	-1/-1	-3/-3	-18/-18	-16/-16	-14/-14	-35/-35	-25/-25	-25/-25	-10/-10	-40/-40	-38

- **Isolation** : 1500 Vrms
- **Impedance** : 100 Ω
- **Rise Time** : 3.0 nS Max.

Package



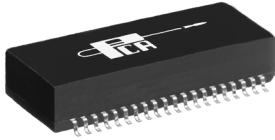
Schematic



Notes :	EPF8183S	EPF8183S-RC
1. Assembly Process (Leadframe) (Solder Composition) (Assembly Solder)	SnPb	Sn
	SnPb	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC-J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC-J-STD-020C)	3 (168 hours, ≤30°C/60%RH)	4 (96 hours, ≤30°C/60%RH)
4. Weight	5.35 grams	5.35 grams
5. Packaging Information (Tube) (*Add "TR" to end of part number when placing order) (Tape & Reel)	20 pieces/tube 350 pieces/13" reel (*EPF8183S-TR)	20 pieces/tube 350 pieces/13" reel (*EPF8183S-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

EPF8183SP



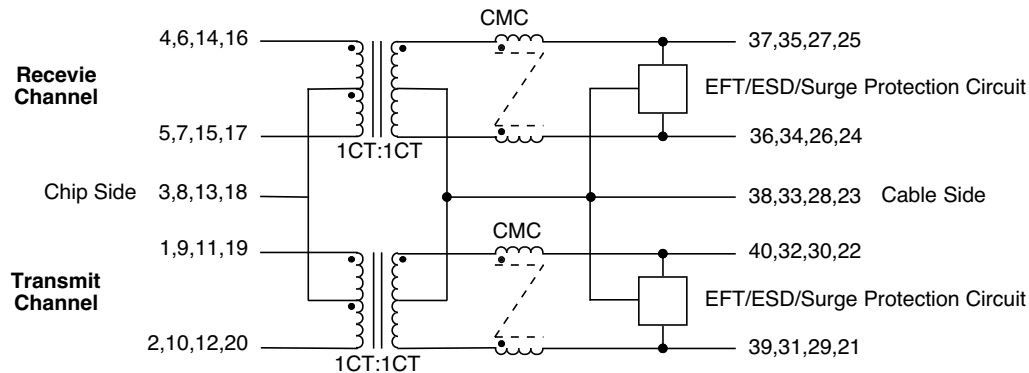
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Cable Side Surge, EFT and ESD Protection Included
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

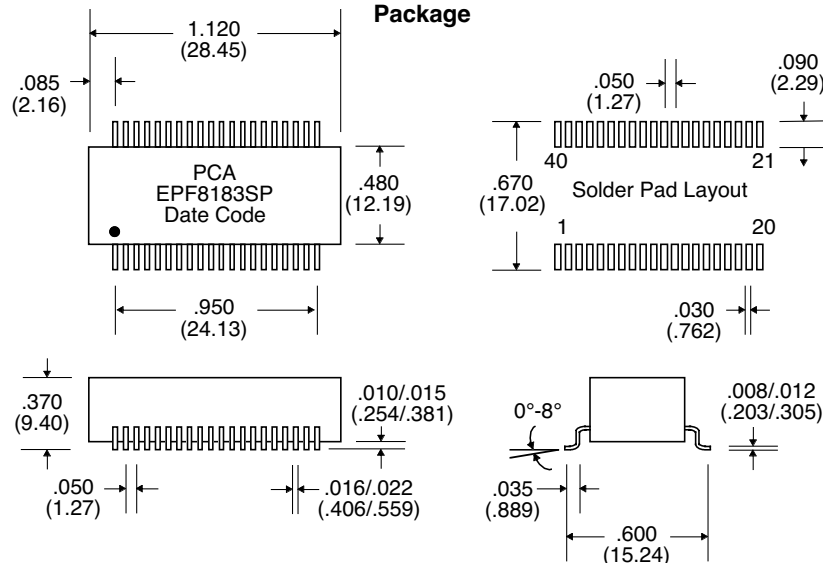
OCL (μ H Min.)	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	150 MHz	30 MHz	30-60 MHz	60-80 MHz	30 MHz	100 MHz	200 MHz	300-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350	-1/-1	-3/-3	-18/-18	18-20 lo f/30	-14/-14	-35/-35	-25/-25	-25/-25	-10/-10	-38

• Isolation : 1500 Vrms • Cable Side Impedance : 100 Ω • Common to Differential Rejection : -40 dB Min. (Xmit/Rcv) @ 1-100 MHz •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module for PC Card Applications EPF8185SL

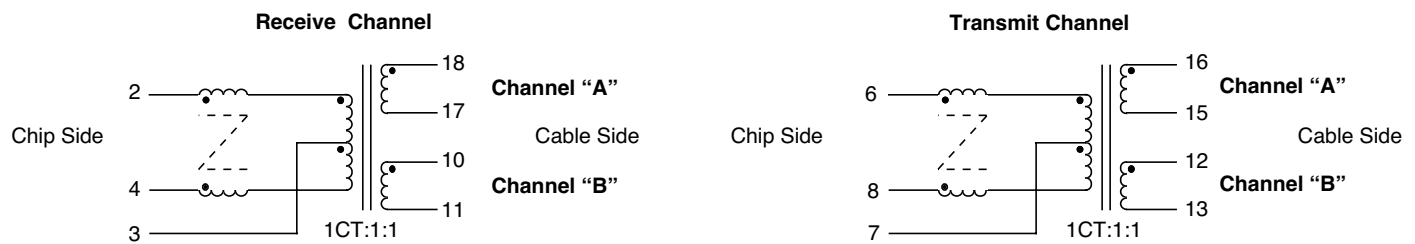
- Recommended for use with SSI 78Q2120 chips
- Low profile, fully integrated with two channels
- Guaranteed to operate with 8 mA DC bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

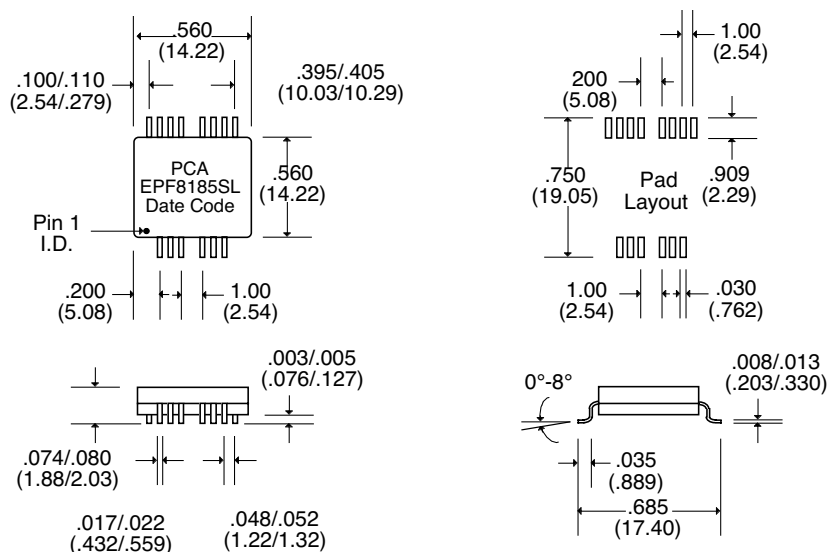
OCL @ 70°C	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.) Between Channels	
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	100 MHz	150 MHz	1-30 MHz	60 MHz	100 MHz	1-30 MHz	100 MHz	500 MHz	5-10 MHz	10-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv		
350 μ H	-1/-1	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-30/-30	-25/-25	-10/-10	-40	-40

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

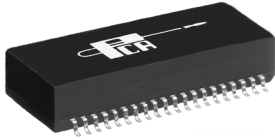
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



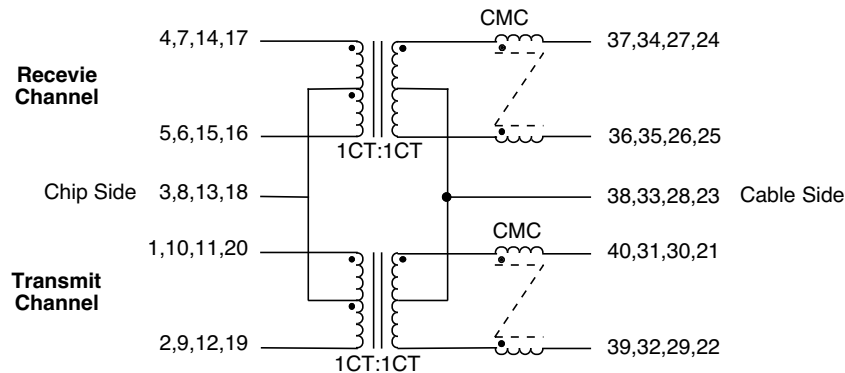
- Significantly Improved Common Mode Attenuation
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

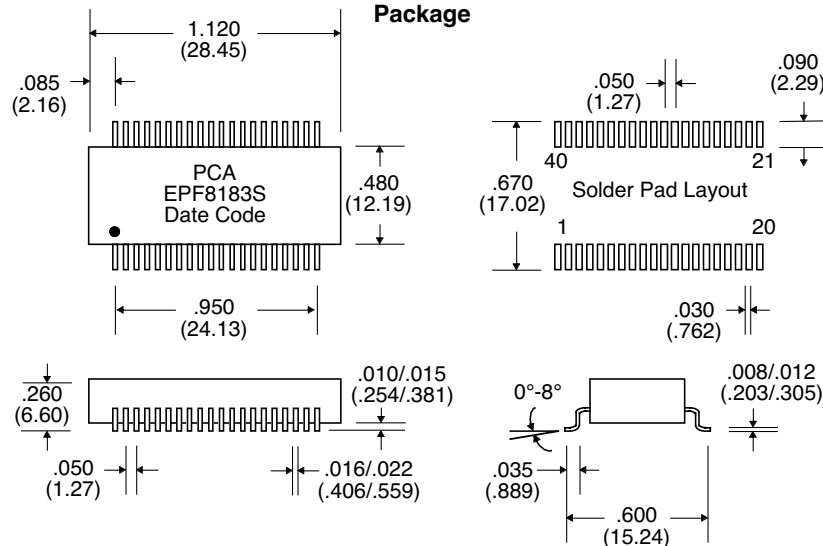
OCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Common to Diff. Reject. (dB Min.)	Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	150 MHz	30 MHz	30-60 MHz	60-80 MHz	30 MHz	100 MHz	200 MHz	300-500 MHz	1-100 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-16/-16	-14/-14	-35/-35	-25/-25	-25/-25	-10/-10	-40/-40	-38

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation EPF8186AG



- Recommended for use with SSI578Q2120 Chip (when connected per appropriate schematic)
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

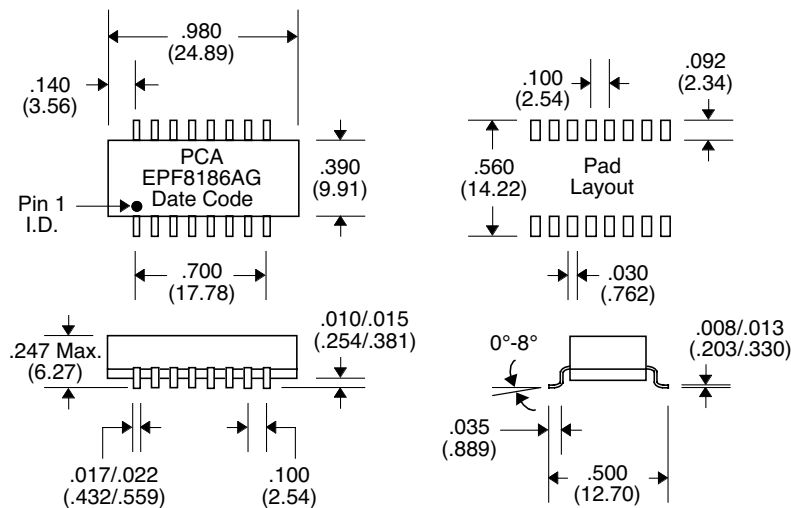
OCL @ 70°C	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk* (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-30 MHz	30-100 MHz	100-200 MHz	200-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-1/-1	-3.5/-3	-18/-18	-12/-12	-10/-10	-45/-45	-35/-35	-30/-20	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. • Crosstalk : Between Channels •

Schematic

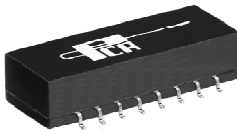


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation EPF8188G



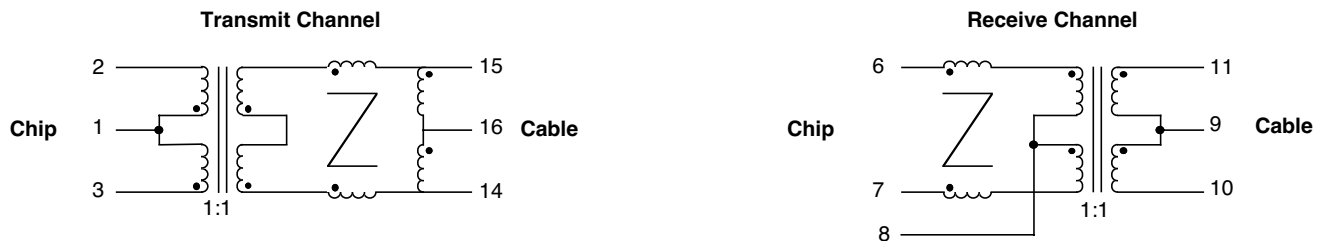
- Recommended for use with SSI578Q2120 Chip
(when connected per appropriate schematic)
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

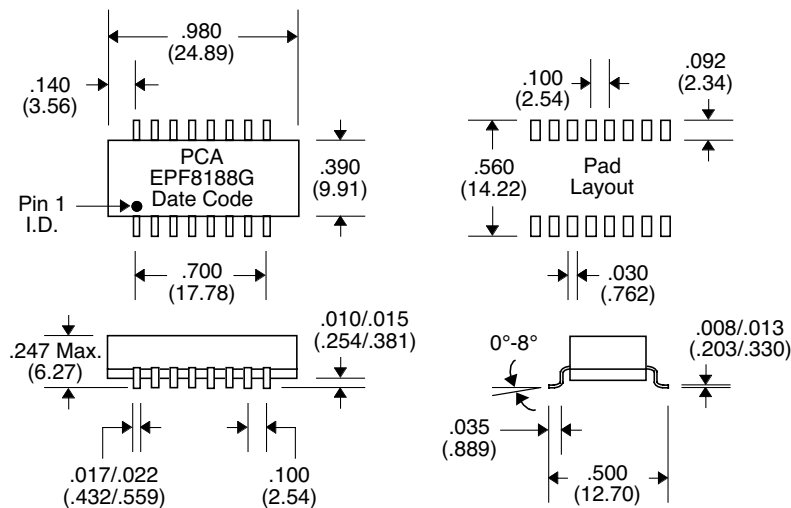
OCL @ 70°C	Insertion Loss (dB Max.)			Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk* (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	80-100 MHz	150 MHz	1-30 MHz	30-60 MHz	60-80 MHz	1-30 MHz	30-100 MHz	100-200 MHz	200-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-1/-1	-3.5/-3	-18/-18	-14/-14	-10/-10	-45/-45	-35/-35	-30/-20	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. • Crosstalk : Between Channels •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

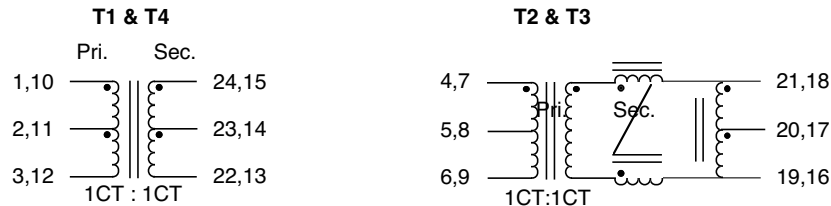
EPF8195F1

- Robust construction allows IR/VP reflow processes
- 1500 Vrms Isolation

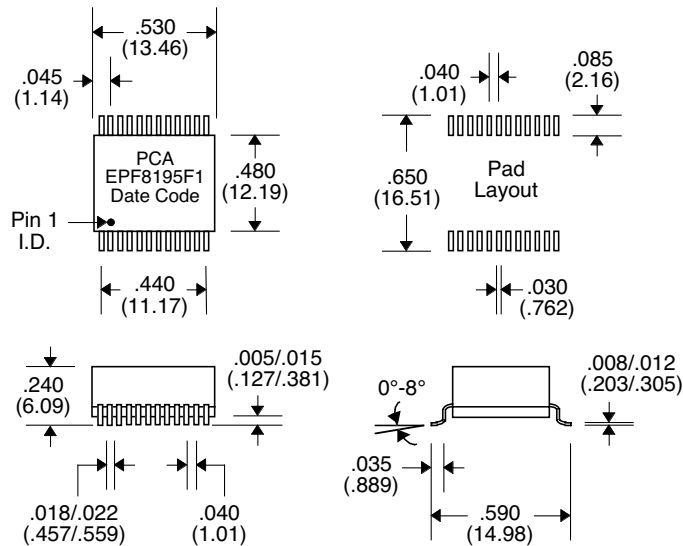
Electrical Parameters @ 25° C

OCL (μ H Min.) 8 mA DC bias	Primary Leakage Inductance (μ H Max.)	Interwinding Capacitance (pF Max.)	Primary DCR (Ω Max.)	
@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	Pri.	Sec.
		Pri. to Sec.	T1 to T4	T2 & T3
350	0.25	40	1	2.8
Pins 24-22, 21-19, 18-16, 15-13			Pins 1-3, 4-6, 7-9, 10-12	Pins 21-19, 18-16

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Interface Module with Enhanced Common Mode Attenuation EPF8196F2

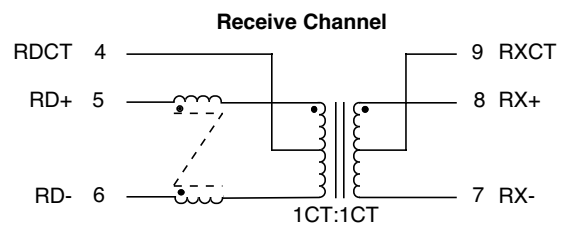
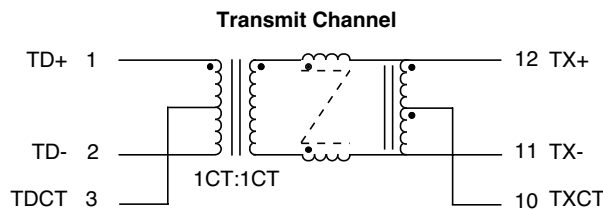
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

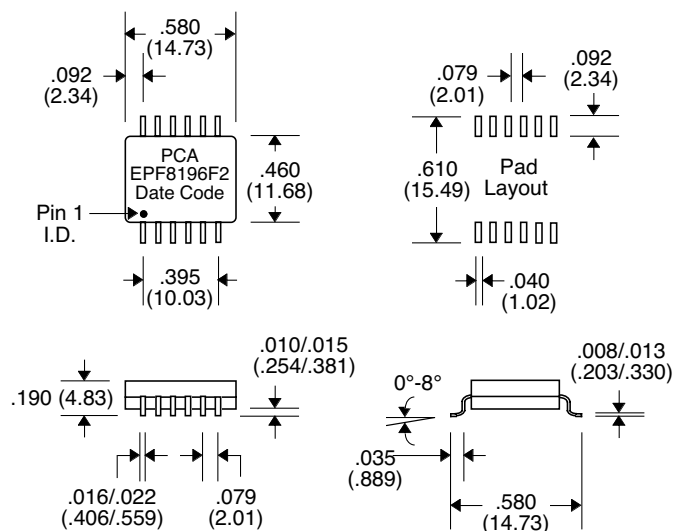
OCL @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)			Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-80 MHz	150 MHz	1-30 MHz	60 MHz	80 MHz	1-30 MHz	30-100 MHz	100-500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-12/-12	-10/-10	-40/-40	-30/-30	-10/-10	-35

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

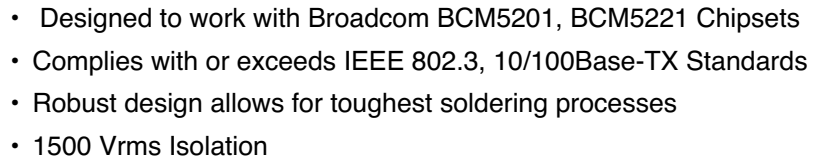
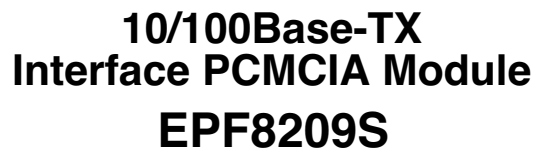
Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



OCL (μ H Min.) @ 8 mA DC Bias	Interwinding Capacitance (pF Max.)	Leakage Inductance (μ H Max.)	CMRR (dB Min.)					Return Loss (dB Min.)			Primary DCR (Ω Max.)	
100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	@ 100 KHz, 0.1 Vrms	1 MHz	30 MHz	60 MHz	80 MHz	100 MHz	1-30 MHz	30-60 MHz	60-80 MHz		
Xmit & Rcv	Xmit & Rcv	Xmit & Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit & Rcv			Xmit	Rcv
350 @ Pins 16-15 & 10-9	25	0.3	-27/-27	-17/-9	-16/-4	-14/-2	-12/-1	-10	-14	-10	1.5	1.0

Package

Top View Dimensions:

- Overall Width: .490 (12.45)
- Pin 1 I.D. to Right Edge: .070 (1.78)
- Pin Pitch: .350 (8.89)
- Pin 1 to Pin 16 Distance: .270 (6.86)
- Pin 1 to Pin 17 Distance: .076/.084 (1.93/2.13)
- Pin 1 to Pin 18 Distance: .003/.008 (0.076/.203)
- Pin 1 to Pin 19 Distance: .018/.022 (.457/.559)
- Pin 1 to Pin 20 Distance: .050 (1.27)

Side View Dimensions:

- Package Height: .085 (2.16)
- Lead Height: .050 (1.27)
- Lead Length: .440 (11.18)
- Lead Spacing: .030 (.762)

Detail View Dimensions:

- Lead Angle: 0°-8°
- Lead Width: .035 (.889)
- Lead Length: .360 (9.14)
- Lead Spacing: .008/.012 (.203/.304)

Other Labels:

- PCA EPF8209S
- Date Code
- Pin 1 I.D.
- Pad Layout

TEL: (818) 892-0761
FAX: (818) 894-5791
<http://www.pca.com>

10/100Base-TX Voice Over IP Magnetic Module EPF8229F

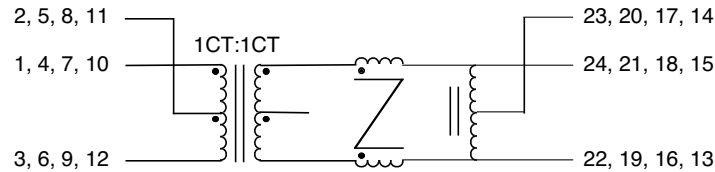
- Designed for Voice Over IP Applications
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards
- Operating Temperature : 0°C to 70°C
- 350 mA Handling Capability
- 1500 Vrms Isolation
- Auto MDIX

Electrical Parameters @ 25° C

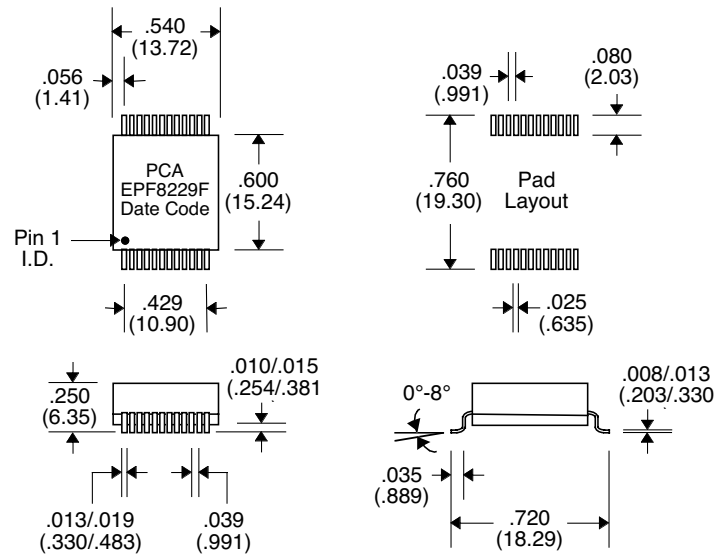
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
100 KHz, 0.1 Vrms 8 mA DC Bias	1-65 MHz	65-100 MHz	100-125 MHz	1-30 MHz	50 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-16	-13	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



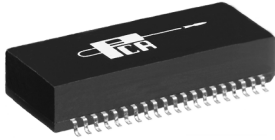
Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

10/100Base-TX Module for Quad-Port Applications

EPF8223S



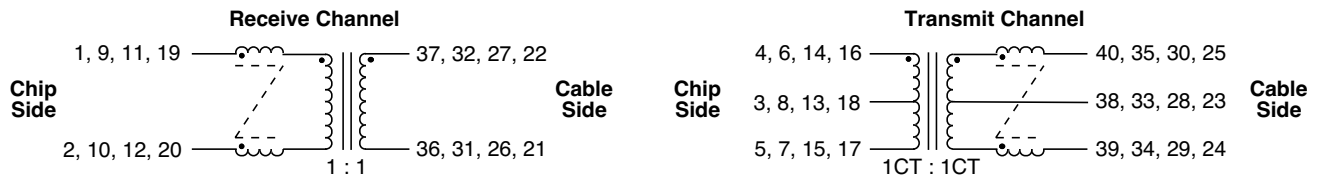
- Guaranteed to operate with 8 mA DC Bias at 70°C
- Complies with or exceeds IEEE 802.3, 10/100Base-TX Standards

Electrical Parameters @ 25° C

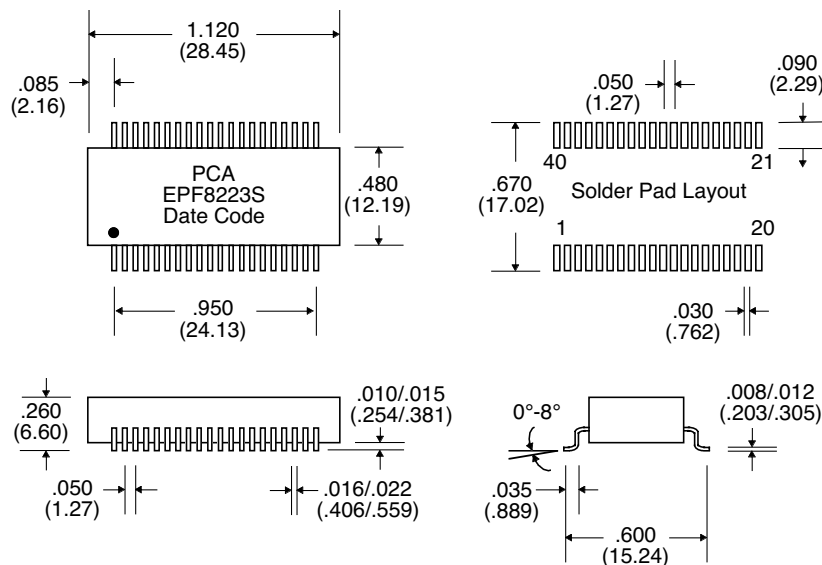
OCV @ 70°C	Insertion Loss (dB Max.)		Return Loss (dB Min.)			Common Mode Rejection (dB Min.)				Crosstalk (dB Min.)
100 KHz, 0.1 Vrms 8 mA DC Bias	1-100 MHz	150 MHz	1-30 MHz	50 MHz	60-80 MHz	30-100 MHz	200 MHz	300 MHz	500 MHz	1-100 MHz
Cable Side	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	Xmit/Rcv	
350 μ H	-1/-1	-3/-3	-18/-18	-14/-14	-12/-12	-30/-20	-20/-15	-20/-10	-10/---	-30

• Isolation : 1500 Vrms • Impedance : 100 Ω • Rise Time : 3.0 nS Max. •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



Contents

1000Base-TX Networking

PCA Part No.	OCL (μH)	Turns Ratio	Package Style	Length	Width	Height
EPG4000S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.730	.490	.270
EPG4000SLH	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.730	.490	.270
EPG4001AS	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.700	.490	.270
EPG4001CS	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.690	.480	.260
EPG4001S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.700	.490	.270
EPG4002S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	1.130	.490	.270
EPG4004	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.550	.610	.235
EPG4004F	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.550	.610	.235
EPG4005	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.550	.610	.235
EPG4006F	350 @ 100KHz, .1 Vrms	1CT:1CT	48 Pin SOIC	1.150	.490	.270
EPG4009F	350 @ 100KHz, .1 Vrms	1CT:1CT	48 Pin SOIC	1.105	.490	.295
EPG4010F	350 @ 100KHz, .1 Vrms	1CT:1CT	48 Pin SOIC	1.105	.490	.270
EPG4011S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.735	.255	.380
EPG4012S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.735	.255	.380
EPG4013S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.690	.480	.175
EPG4014S	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.690	.480	.175
EPG4016F	350 @ 100KHz, .1 Vrms	1CT:1CT	24 Pin SOIC	.540	.600	.225



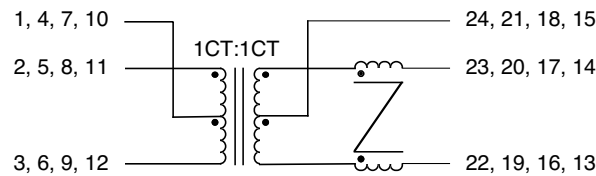
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

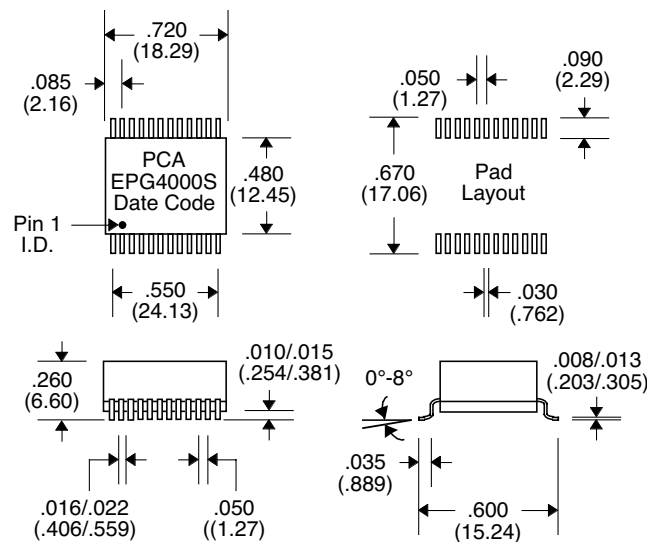
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$



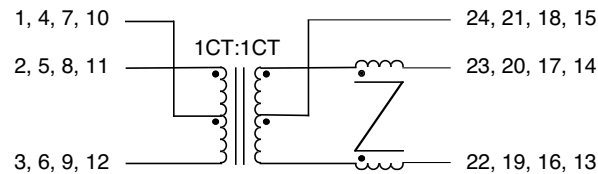
- Guaranteed to operate with 100 Base-X
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

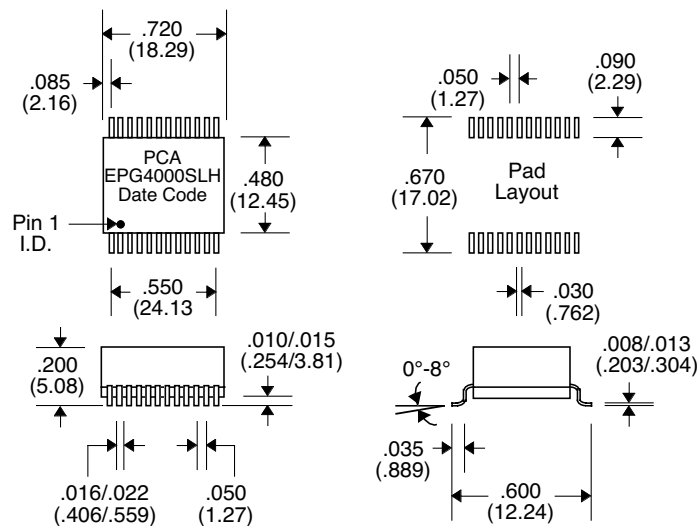
OCL (μ H Min.) @ 8 mA DC bias	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

EPG4001AS & EPG4001AS-RC



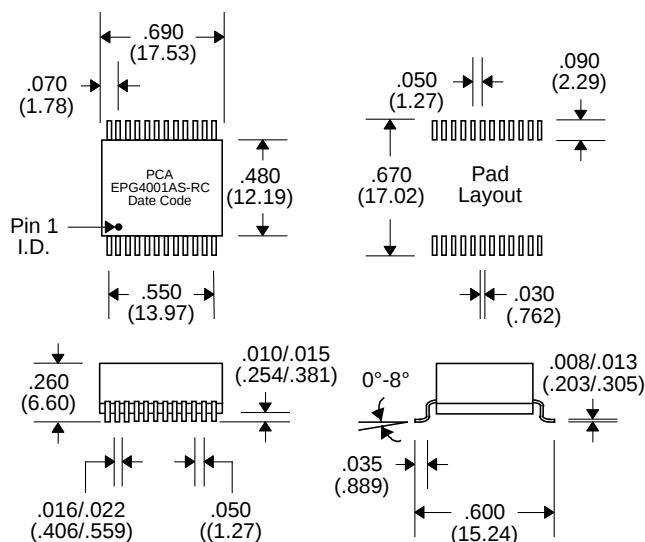
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation
- RoHS Compliant

Electrical Parameters @ 25° C

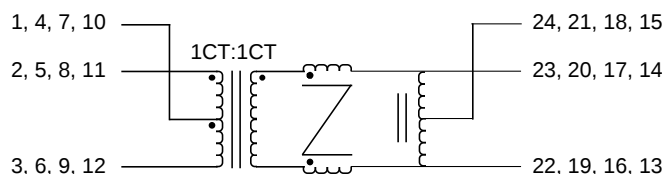
OCCL (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Package

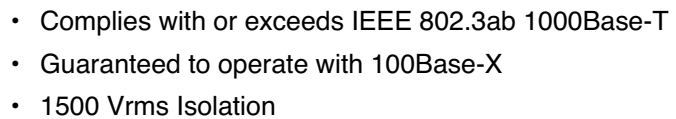
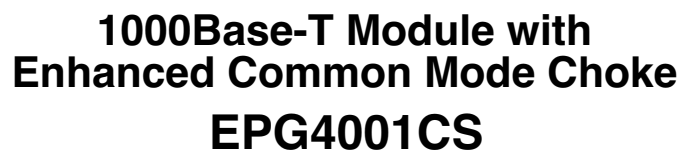


Schematic



Notes :		EPG4001AS	EPG4001AS-RC
1. Assembly Process (Solder Composition)	(Lead Frame Finish)	SnPb	Sn or SnAG
	(Assembly Solder)	SnPb	SnPb [RoHS Exemption 7a]
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)		225°C (+0/-5°C)	260°C (+0°C)
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)		3 (168 Hours, ≤30°C/60%RH)	4 (72 Hours, ≤30°C/60%RH)
4. Weight		3.35 grams	3.35 grams
5. Packaging Information	(Tube)	30 pieces	30 pieces
	(Tape & Reel)	350 pieces/13" reel (*EPG4001AS-TR)	350 pieces/13" reel (*EPG4001AS-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25



OCL (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-500 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

Figure 1: Mechanical drawing of the PCA EPG4001CS package. The drawing includes top, side, and bottom views with dimensions in inches and millimeters. Key dimensions include: Top view (left) showing a width of .690 (17.53) and a pin pitch of .070 (1.78); Top view (right) showing a width of .670 (17.02) and a pin pitch of .050 (1.27); Side view (left) showing a height of .480 (12.19) and a pin pitch of .550 (13.97); Side view (right) showing a height of .260 (6.60) and a pin pitch of .016/.022 (.406/.559); Bottom view (left) showing a width of .550 (13.97) and a pin pitch of .050 (1.27); Bottom view (right) showing a width of .600 (15.24) and a pin pitch of .035 (.889). The package is labeled 'PCA EPG4001CS Date Code'.

TEL: (818) 892-0761
FAX: (818) 894-5791
<http://www.pca.com>

EPG4001S



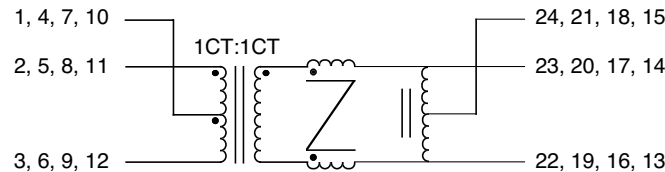
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

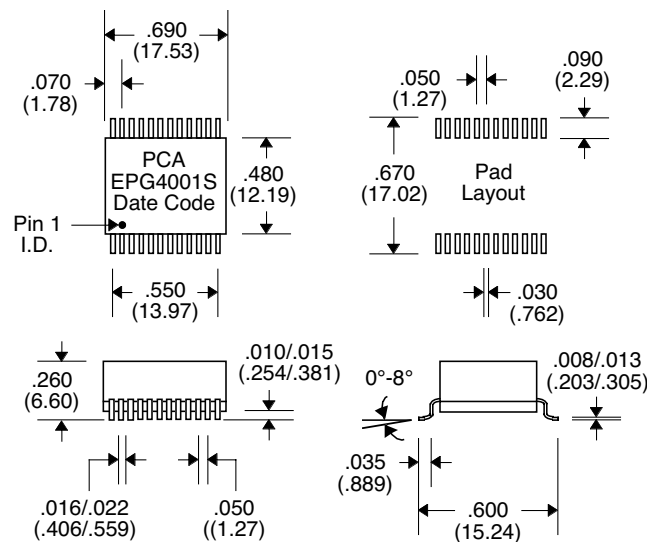
OCL (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

- **Rise Time** : 1.75 nS Max.
- **Impedance** : 100 Ω
-

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

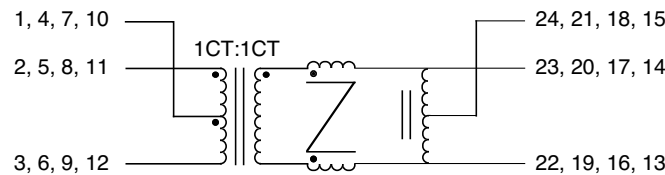
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

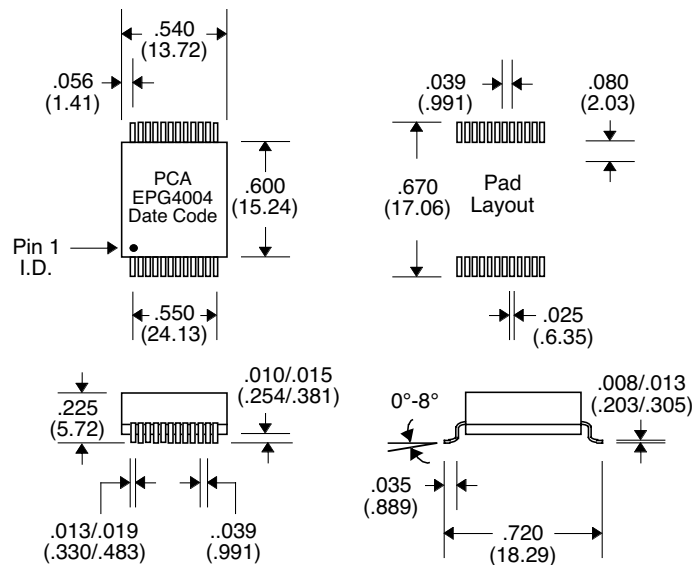
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

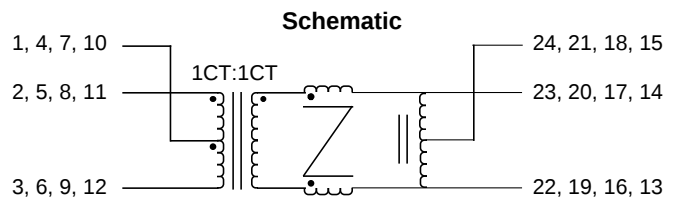
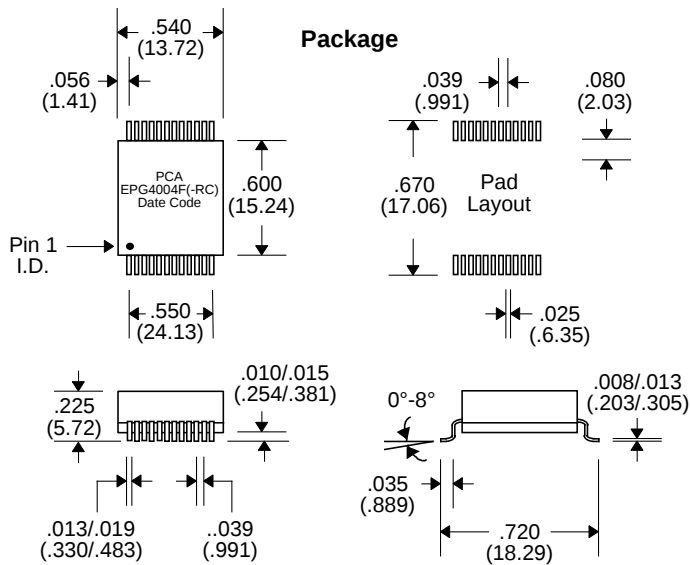
EPG4004F & EPG4004F-RC

- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation
- RoHS Compliant

Electrical Parameters @ 25° C

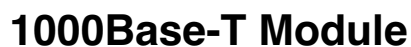
OCV (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

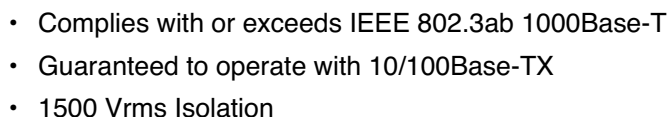


Notes :	EPG4004F	EPG4004F-RC
1. Assembly Process (Solder Composition)	(Leadframe) SnPb	Sn
	(Assembly Solder) SnPb	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)	3 (168 Hours, ≤30°C/60%RH)	4 (72 Hours, ≤30°C/60%RH)
	5.6 grams	5.6 grams
4. Weight	18 pieces/tube	18 pieces/tube
5. Packaging Information	(Tube)	(Tube)
	(Tape & Reel) 350 pieces/13" reel (*EPG4004F-TR)	(Tape & Reel) 350 pieces/13" reel (*EPG4004F-RC-TR)

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

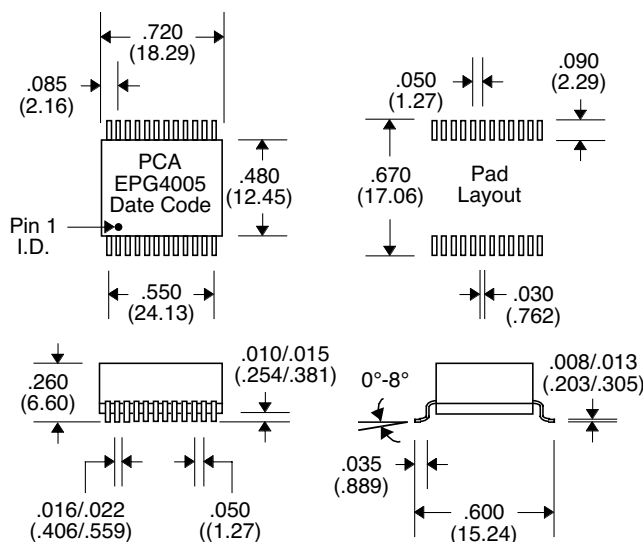


EPG4005

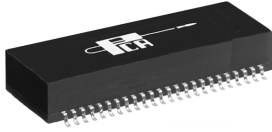


OCL (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

Schematic



TEL: (818) 892-0761
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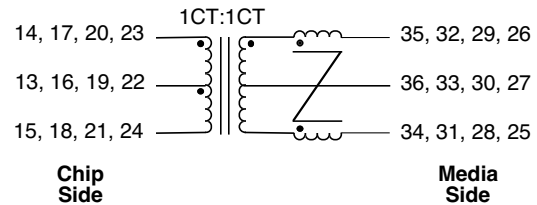
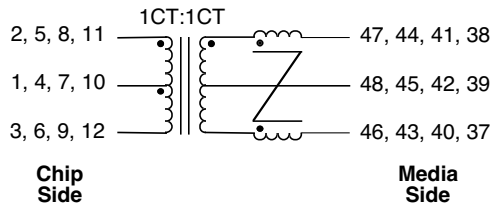
- Complies with or exceeds IEEE 802.3 1000Base-T Standards
- Guaranteed to operate with 8 mA DC Bias at 0°C to +70°C
- Transfer Molded Part
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

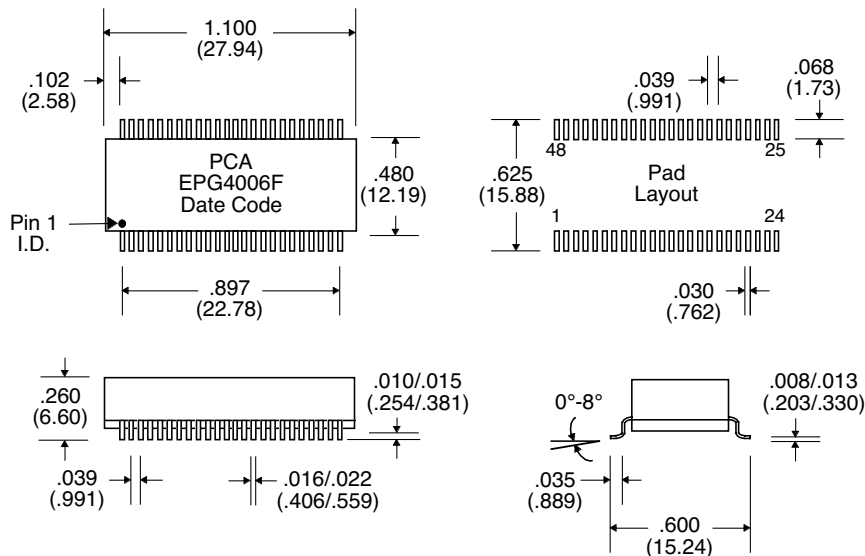
OCL (μ H Min.)	Insertion Loss (dB Max.)				Return Loss (dB Min.)				CMRR (dB Min.)			Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-80 MHz	100 MHz	150 MHz	200 MHz	1-80 MHz	100 MHz	150 MHz	200 MHz	1-80 MHz	80-200 MHz	500 MHz	1-100 MHz	150 MHz	200 MHz
350 (Media Side)	-1.0	-1.1	-1.5	-2.0	-18	-15	-10	-8	-35	-30	-25	-40	-38	-35

Impedance : 100 Ω • Rise Time : 1.75 nS Max.

Schematic

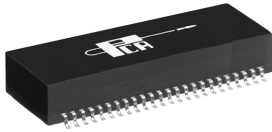


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

EPG4009F



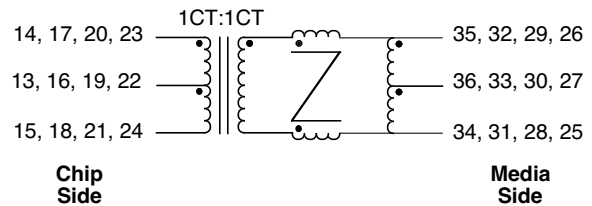
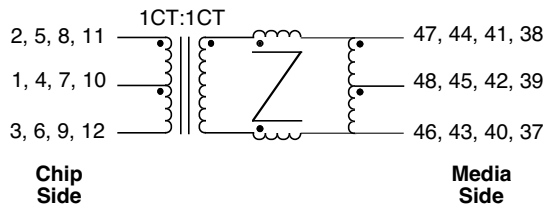
- Complies with or exceeds IEEE 802.3 1000Base-T Standards
- Guaranteed to operate with 8 mA DC Bias at 0°C to +70°C
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

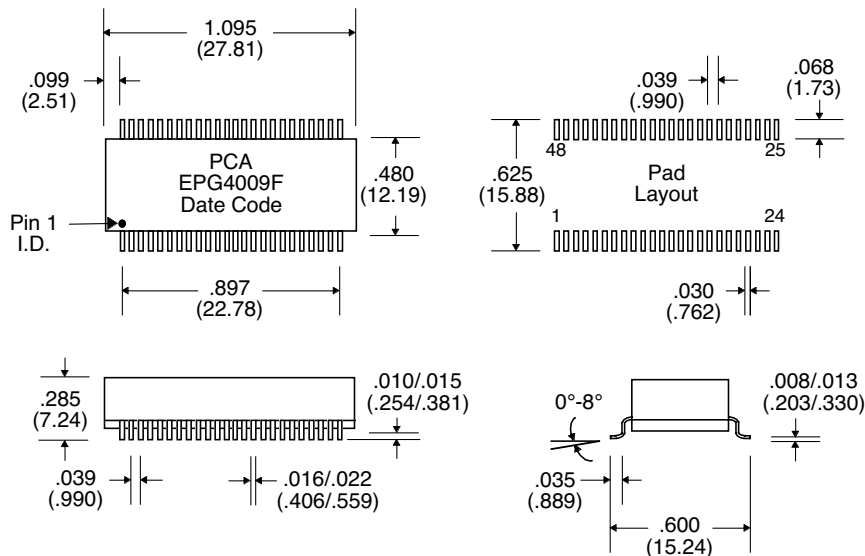
OCL (μ H Min.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)					CMRR (dB Min.)			Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-100 MHz	1-30 MHz	40 MHz	50 MHz	60- 80	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
350 (Media Side)	-1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33

• Impedance : 100 Ω •

Schematic

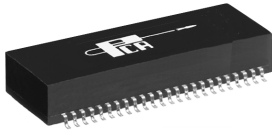


Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

EPG4010F



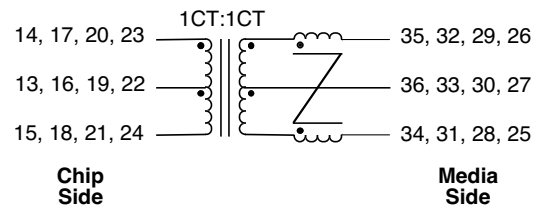
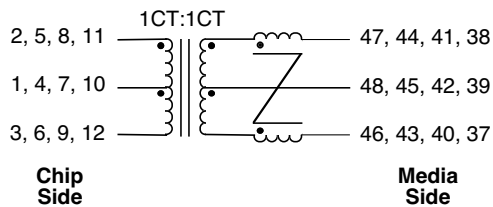
- Complies with or exceeds IEEE 802.3 1000Base-T Standards
- Guaranteed to operate with 8 mA DC Bias at 0°C to +70°C
- Transfer Molded Part
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

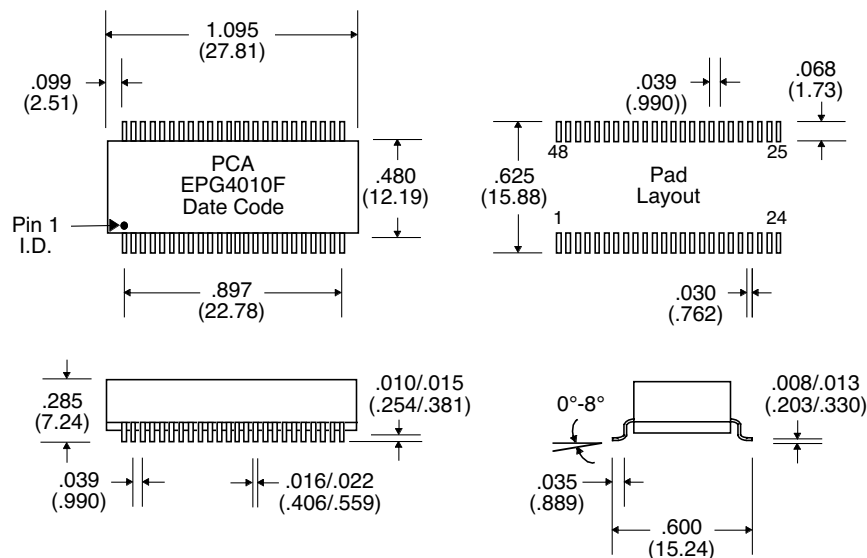
OCL (μ H Min.)	Insertion Loss (dB Max.)	Return Loss (dB Min.)					CMRR (dB Min.)			Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-100 MHz	1-30 MHz	40 MHz	50 MHz	60-80 MHz	100 MHz	30 MHz	60 MHz	100 MHz	30 MHz	60 MHz	100 MHz
350 (Media Side)	-1.4	-16	-14.4	-13.1	-12	-10	-45	-40	-35	-43.5	-37.5	-33

• Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

EPG4011J & EPG4011J-RC

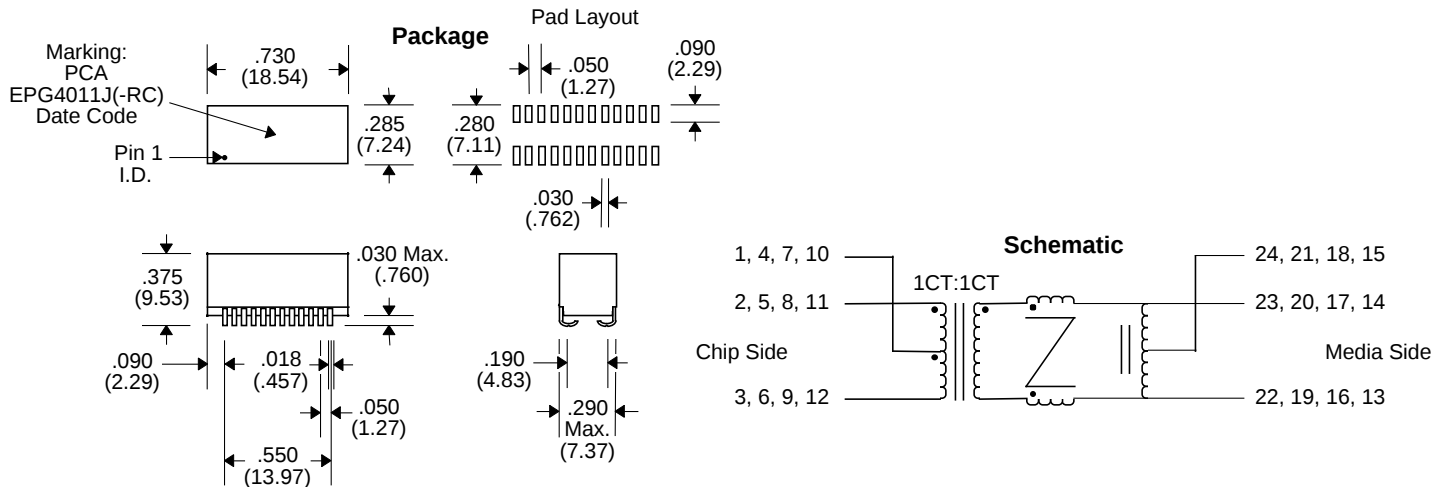


- Smallest Gigabit Magnetic Module
- Ideal for Multiport 10/100Base-TX as Gigabit Solutions
- Suitable for Auto MDIX 10/100Base-TX Applications
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- Operating Temperature Range : 0°C to 70°C
- Enhanced Common Mode Choke
- RoHS Compliant

Electrical Parameters @ 25° C

OCV (μH Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Isolation : 1500 Vrms • Rise Time : 1.75 nS Max. • Impedance : 100 Ω •



Notes :	EPG4011J	EPG4011J-RC
1. Assembly Process (Leadframe) (Solder Composition)	SnPb	Sn
	SnPb	SnPb (RoHS exemption 7a)
2. Peak Solder Rating (per IPC/JEDEC J-STD-020C)	225°C	260°C
3. Moisture Sensitive Levels (MSL) (per IPC/JEDEC J-STD-020C)	3 (168 Hours, ≤30°C/60%RH)	4 (72 Hours, ≤30°C/60%RH)
4. Weight	5.6 grams	5.6 grams
5. Packaging Information (Tube) (Tape & Reel)	18 pieces/tube	18 pieces/tube
	350 pieces/13" reel (*EPG4011J-TR)	350 pieces/13 reel (*EPG4011J-RCTR)

Unless Otherwise Specified Dimensions are in Inches /mm ± .010 / .25

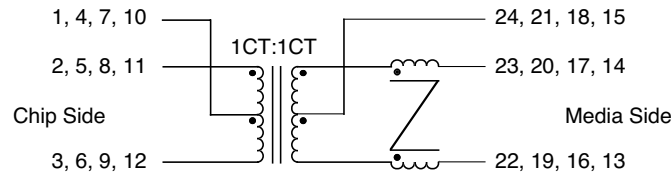
- Smallest Gigabit Magnetic Module
- Ideal for Multiport 10/100Base-TX as Gigabit Solutions
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- Enhanced Common Mode Choke
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

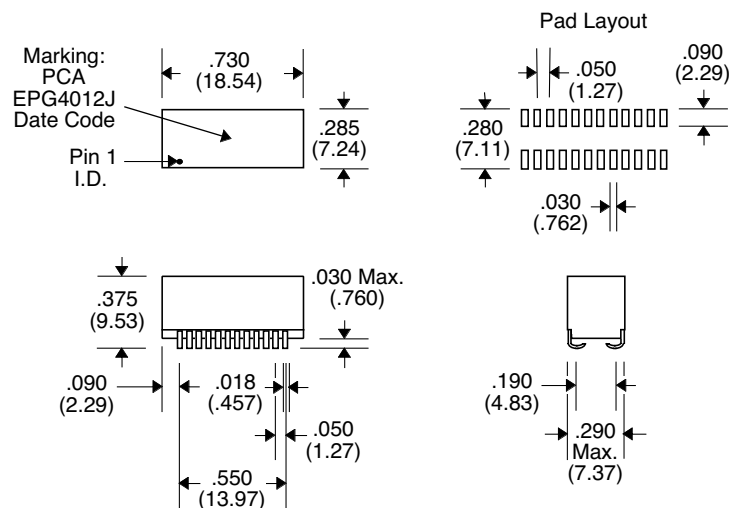
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Crosstalk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

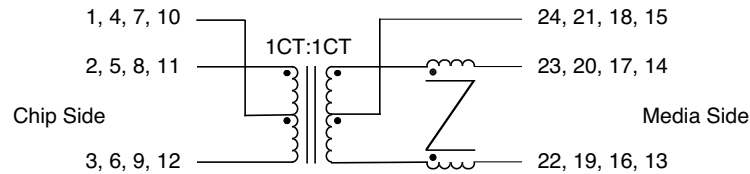
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

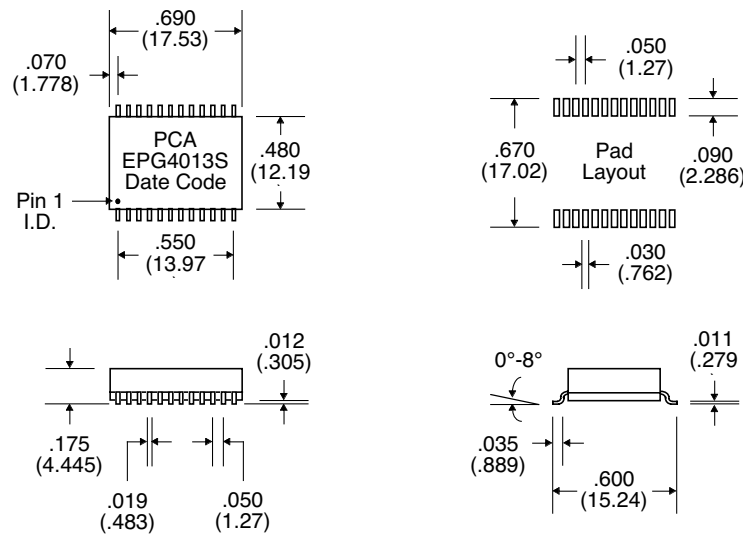
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



Unless Otherwise Specified Dimensions are in Inches /mm $\pm .010 / .25$

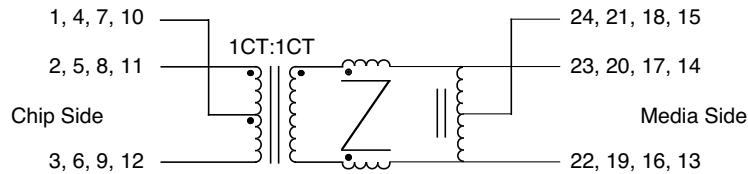
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

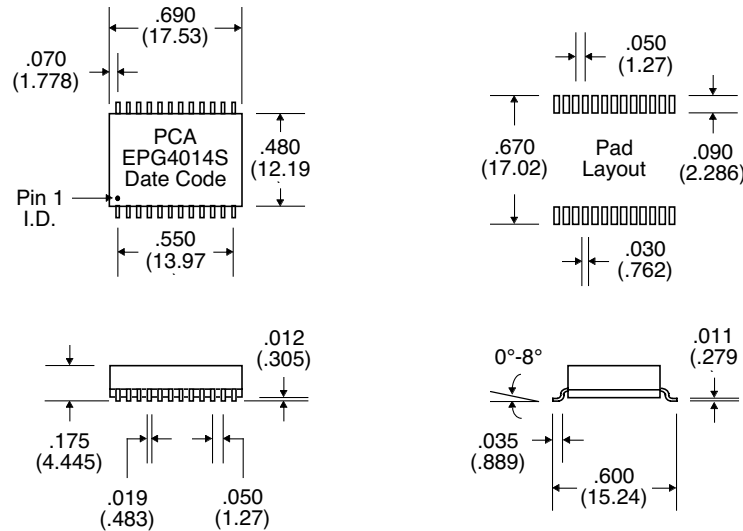
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

Schematic



Package



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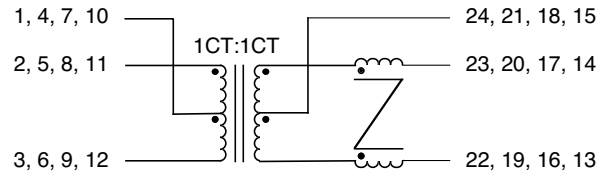
- Complies with or exceeds IEEE 802.3ab 1000Base-T
- Guaranteed to operate with 10/100Base-TX
- 1500 Vrms Isolation

Electrical Parameters @ 25° C

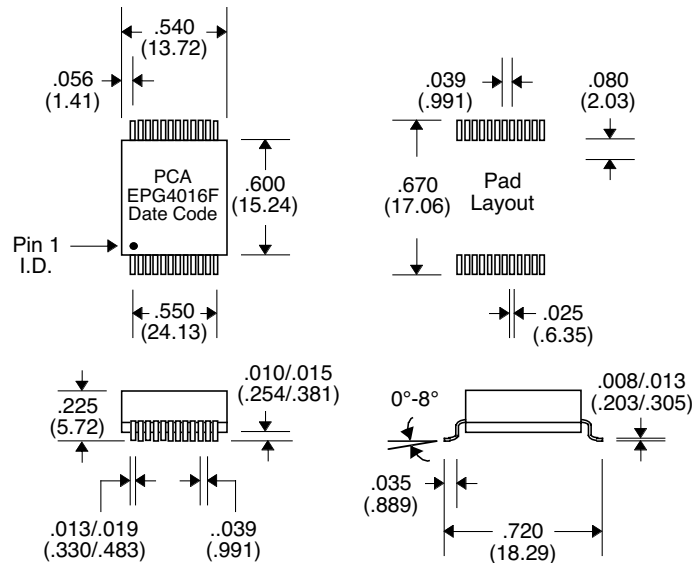
OCL (μ H Min.)	Insertion Loss (dB Max.)			Return Loss (dB Min.)				CMRR (dB Min.)	Common to Differential (dB Min.)				Cross talk (dB Min.)		
@ 100 KHz, 0.1 Vrms 8 mA DC bias	1-65 MHz	65-100 MHz	100-125 MHz	1-40 MHz	60 MHz	80 MHz	100 MHz	1-80 MHz	1 MHz	30 MHz	50 MHz	100 MHz	1-40 MHz	60 MHz	100 MHz
350 (Media Side)	-1	-1.1	-1.5	-18	-15	-12	-10	-30	-60	-40	-35	-30	-40	-35	-30

• Rise Time : 1.75 nS Max. • Impedance : 100 Ω •

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