

ADSL Coupling Transformers



FEATURES:

- Supports Industry Standard ADSL/ADSL Lite Transceivers
- Operating Temperature Range of -40°C to 85°C
- Excellent Total Harmonic Distortion Characteristics
- Meets Standard Dielectric Withstanding Voltage Requirements
- Surface Mountable Configurations Available*
- Designs Support Line Rates up to 8 Mb/s Applications
- Conforms to ANSI, ITU and ETSI Standards Requirements

OPTIONS:

- Custom designs available
- SMD Available

STANDARD SPECIFICATIONS @ 25°

Part Number*	Apps	Turns Ratio** (Chip Line)	OCL (Chip Line)	R _L @Midband (dB)	I _L (dB)	Longitudinal Balance (dB)	THD (dB)	Pkg.	Cir.
ADSL -107 ¹	COE	1:1:2:2	470 µH	≥16 .2 - 2 MHz	< 1.1 .04 - 2 MHz	≥ 50 .025 - 1.1 MHz	≤ -70	EP13	1
ADSL -102 ²	CPE	1:1:1:1	470 µH	≥16 .2 - 2 MHz	< 1.1 .04 - 2 MHz	≥ 50 .025 - 1.1 MHz	≤ -70	EP13	1
ADSL -108 ³	COE	1CT:1.2	2.75 mH	≥16.5 30 - 320 KHz	< 1.1 .03 - 1 MHz	≥ 50 .025 - 1.1 MHz	≤ -80	EP13	2
ADSL -109 ⁴	CPE	1.8:1	12.96 mH	≥16 .03 - 1.1 MHz	< 1.0 .03 - 1 MHz	≥ 50 .025 - 1.1 MHz	≤ -80	EP13	2
ADSL -101 ⁵	CO/CP	1:1:1:1	5.0 mH	≥16.5 30 - 320 KHz	< 1.0 30-320 KHz	≥ 50 .025 - 1.1 MHz	≤ -80	EP13	1
ADSL -110 ⁶	COE	1.41:1	940 µH	≥16.5 .2 - 2 MHz	< 1.0 .04 - 2 MHz	≥ 55 .025 - 1.1 MHz	≤ -80	23x11	3
ADSL -103 ⁷	COE	1.41:1	940 µH	≥16.5 .2 - 2 MHz	< 1.1 .04 - 2 MHz	≥ 60 .025 - 1.1 MHz	≤ -80	EP13	1
ADSL -105 ⁸	CPE	1:1:1:1	410 µH	≥16 .2 - 2 MHz	< 1.5 .04 - 2 MHz	≥ 55 .025 - 1.1 MHz	≤ -80	EP13	1
ADSL -111 ⁹	CPE	1:1:1:1	410 µH	≥16 .2 - 2 MHz	< 1.5 .04 - 2 MHz	≥ 55 .025 - 1.1 MHz	≤ -80	EP13	3
ADSL -112 ¹⁰	COE	1:1.41	475 µH	≥16 .2 - 1.1 MHz	< 1.0 .03 - 2 MHz	> 60 .025 - 1.1 MHz	≤ -80	EP13	3
ADSL -104	CO/CP	1:1:1:1	1.25 mH	≥15 .03 - 1.1 MHz	< 1.0 .04 - 2 MHz	≥ 50 .025 - 1.1 MHz	≤ -80	EP13	4
ADSL -106 ¹¹	COE	1:1.95	1.5 mH	≥16 .02 - 1.1 MHz	< 1.0 .03 - 2 MHz	≥ 60 .025 - 1.1 MHz	≤ -80	EP13	5
ADSL -113 ¹²	CPE	1:3.3	800 µH	≥15 .2 - 2 MHz	< 1.2 .04 - 2 MHz	≥ 40 .025 - 1.1 MHz	≤ -80	EP13	4 ¹²
ADSL -114	COE	1:1:2:2	409 µH	≥16 .2 - 2 MHz	< 1.1 .2 - 2 MHz	≥ 50 .02 - 1.1 MHz	≤ -78	EP13	4
ADSL -115	CPE	1:1:2:2	100 µH	≥16 .2 - 2 MHz	< 1.1 .2 - 2 MHz	≥ 50 .02 - 1.1 MHz	≤ -90	EP13	4
ADSL -116	CO/CP	1:1:2:2	440 µH	≥16 .2 - 2 MHz	< 1.1 .1 - 1.1 MHz	≥ 50 .03 - 1.1 MHz	≤ -90	EP13	4 ¹²
ADSL -117	CPE	1:1.8	450 µH	≥16 .2 - 2 MHz	< 1.3 .03 - 2 MHz	≥ 60 .025 - 1.1 MHz	≤ -80	EP13	3
ADSL -118	COE	1:1.41	475 µH	≥16 .2 - 1.1 MHz	< 1.1 .1 - 1.1 MHz	≥ 60 .025 - 1.1 MHz	≤ -80	EP13	4

Test Conditions:

1. OCL: 100 mV @ 10 KHz with appropriate IDC = 60 mA
2. THD: 6 Vp-p @ 30 KHz with 100Ω

3. Longitudinal Balance: frequency range specified with 100Ω
4. DWV: 1,500 VRMS, greater voltage isolation available

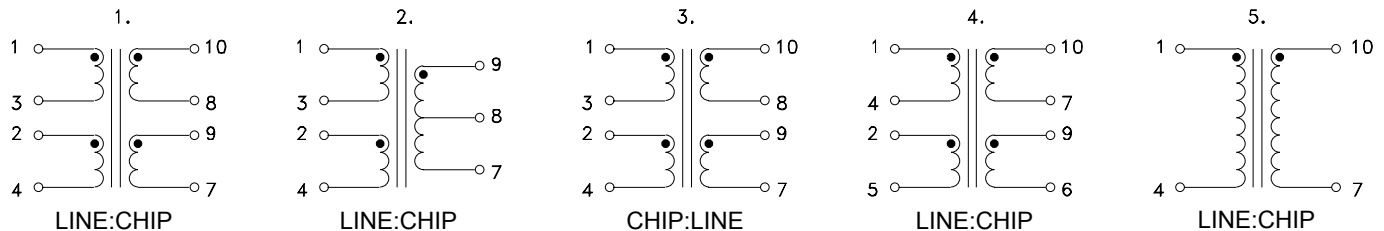


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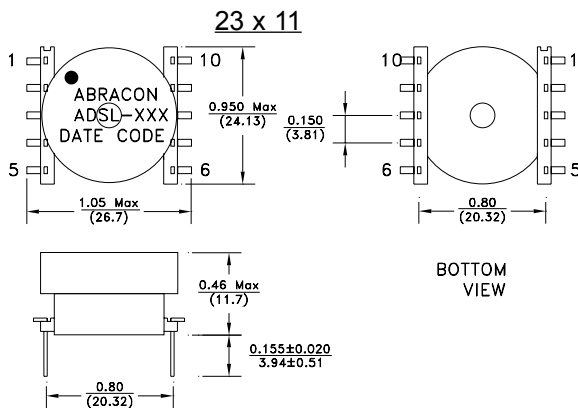
Notes:

- * P/Ns with "S" as suffix are configured for surface mountable applications
- ** "CT" indicates a center-tapped winding, otherwise readings are intended to be across entire winding segment
- 1. Supports Alcatel MTK 20150/134AFE / DCR < 0.5/0.8 Ω .
- 2. Supports Alcatel MTK 20140/134AFE / DCR < 1.0/1.0 Ω .
- 3. Supports Motorola MC145650 (MC03AX1456CO Line Driver) w/ DCR < 4.0/2.2, 2.2 Ω .
- 4. Supports Motorola MC145650 (MC03AX1456CO Line Driver) w/ DCR < 3.0/1.0, 1.0 Ω ; $I_{DC} = 0$
- 5. Supports Analog Devices AD20msp910/918 / DCR < 4.5/4.5 Ω .
- 6. Supports Globespan 7M640 / DCR < 1.0/1.0 Ω and DWV @ 3000 Vrms
- 7. Supports Globespan 7M640 / DCR < 2.4/1.5 Ω .
- 8. Supports Elantec EL-1501 / DCR < 1.5/1.5 Ω .
- 9. Supports Alcatel MTK 20131/134AFE / DCR < 1.5/1.5 Ω .
- 10. Supports Elantec EL-1501 / DCR < 1.0/1.0 Ω .
- 11. Supports T.I. TNETD3000C/P and BB1302 AFE
- 12. Supports connexant CN9001 circuit #4 (chip:line) pins reversed

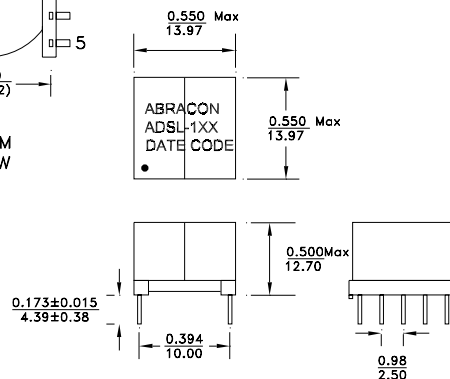
CIRCUITS



PACKAGES

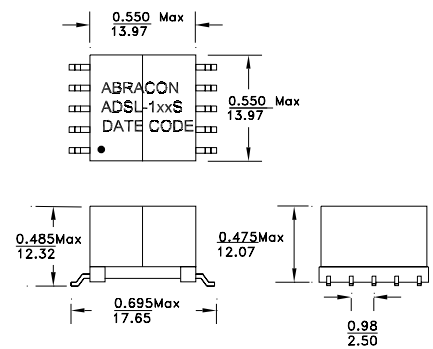


Thru-Hole



EP13

SMD



Dimension : Inch/mm