



LAN COUPLING TRANSFORMERS

FAST ETHERNET and GIGABIT SERIES

FAST ETHERNET TRANSFORMERS

STANDARD SPECIFICATIONS ⁵

Part Number ^{1,5}	TURNS RATIO ^{3,4} ($\pm 2\%$)	I_L (dB) MHz (MAX) .1 - 100	R_L (dB) MHz (MIN)			CMR(dB) MHz (MIN) .1 - 100	X-Talk(dB) MHz (MIN)			Cir	Pkg
			.1 - 30	30 - 50	50 - 80		1.0 - 30	30 - 60	60 - 100		
APT-104	1CT:1CT	1.1	20	14	11.5	33	42	37	33	1	A
ALAN-101	1CT:1CT	1.1	18	15	13	30	42	38	35	1	A
ALAN-102	1CT:1CT	1.1	18	15	13	30	42	38	35	2	A
ALAN-103	1CT:2CT	1.1	18	13	13	30	42	38	35	1	A
ALAN-104	1CT:1.41CT	1.1	18	13	13	30	42	38	35	1	A
ALAN-108	1CT:1CT	1.0	22	18	12	32	50	40	40	3	C
ALAN-113	1CT:1CT	1.0	20	18	14	33	50	40	40	4	C
ALAN-114 ²	1CT:1CT	1.2	16	13	12	30	43	37	33	5	D
ALAN-117	1CT:1CT	1.0	22	20	12	35	50	40	40	1	C
ALAN-121	1CT:1CT	1.2	18	13	12	42	44	40	38	6	B
ALAN-122	1CT:1CT	1.2	16	13	12	38	44	40	38	7	B
ALAN-123	1CT:2CT	1.2	16	13	12	35	44	40	38	7	B
ALAN-124	1CT:1.41CT	1.2	16	13	12	42	44	40	38	6	B
ALAN-125	1CT:41CT	1.2	16	13	12	38	44	40	38	7	B
ALAN-131	1CT:1CT	1.1	18	14	12	35	45	42	40	4	C
ALAN-132	1CT:1.41CT	2.0	18	12	11	34	45	38	34	4	C
ALAN-133	1CT:1CT	1.0	20	16	13	35	45	40	38	20	C
ALAN-134	1CT:1CT	1.0	18	14.4	12	25	55	45	33	21	A
ALAN-407 ²	1CT:1CT	1.0	18	12	10	30	33	30	28	11	D
ALAN-414 ²	1CT:1CT	1.1	18	15.5	10	40	38	38	38	11	D
ALAN-415 ²	1CT:1CT	1.0	18	14.4	12	25	55	40	33	22	D
ALAN-501	1CT:1CT	1.1	18	15	11	30	45	38	35	8	E
ALAN-502	1CT:1.41CT	1.1	18	15	11	30	45	38	35	8	E
ALAN-503	1CT:1CT	1.1	18	15	11	30	45	38	35	9	F
ALAN-504	1CT:1.41CT	1.1	18	15	11	30	45	38	35	9	F
ALAN-505	1CT:1CT	1.0	16	12	11	20	50	45	40	10	G

GIGABIT MODULES

Part Number ^{1,5}	TURNS RATIO ^{3,4} ($\pm 2\%$)	I_L (dB) MHz (MAX) .1 - 100	R_L (dB) MHz (MIN)			CMR(dB) MHz (MIN) .1 - 100	X-Talk(dB) MHz (MIN)			Cir	Pkg
			.1 - 30	30 - 50	50 - 80		1.0 - 30	30 - 60	60 - 100		
ALAN-1001	1CT:1CT	1.1	18	13	12	40	45	40	38	11	D
ALAN-1002	1CT:1CT	1.1	18	13	12	40	45	40	38	12	D

10/100BASE-T QUAD CONFIGURATIONS

Part Number ^{1,5}	TURNS RATIO ^{3,4} ($\pm 2\%$)	I_L (dB) MHz (MAX) .1 - 100	R_L (dB) MHz (MIN)			CMR(dB) MHz (MIN) .1 - 100	X-Talk(dB) MHz (MIN)			Cir	Pkg
			.1 - 30	30 - 50	50 - 80		1.0 - 30	30 - 60	60 - 100		
ALAN-401	1CT:1.41CT	1.1	18	13	12	40	45	40	38	13	H
ALAN-402	1CT:1.41CT	1.1	18	13	12	40	45	40	38	14	H
ALAN-405	1CT:2CT	1.0	18	12	10	30	42	40	30	13	H
ALAN-406	1CT:1CT	1.0	21	14	12	30	55	45	35	14	H
ALAN-408	1CT:1CT	1.0	18	13	12	30	55	45	35	15	H
ALAN-409	1CT:1CT	1.0	18	13	12	25	45	40	33	16	H
ALAN-410	1CT:1CT	1.1	21	14	12	30	50	40	30	17	H
ALAN-411	1CT:1CT	1.0	21	14	12	30	55	45	35	18	H
ALAN-412	1CT:1CT	1.1	21	14	12	40	55	45	35	19	H



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CIRCUITS:

Test Conditions:

A. OCL: 100 mVRMS @ 100 KHz with 8 mA DC

B. R/L measurements assume 100 Ω media interface

C. Bias: 8 mA (minimum) steady state DC

D. DWV: 1,500 VRMS for 1 minute min; greater isolation voltage available

Notes:

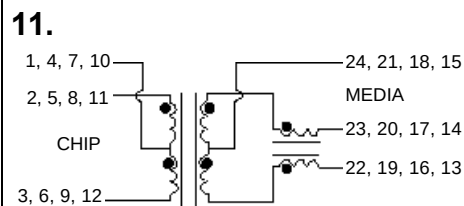
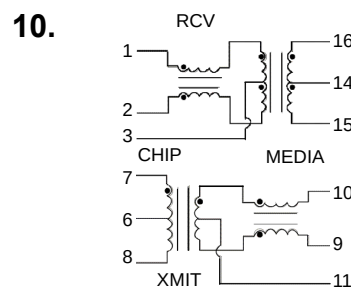
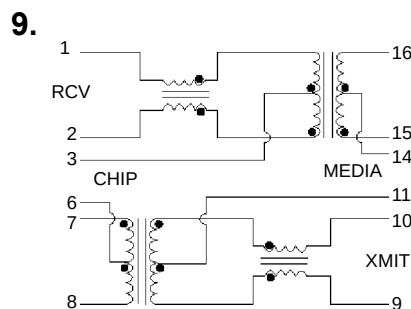
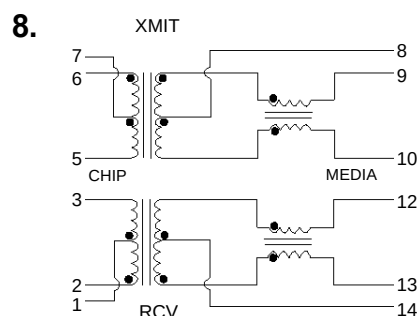
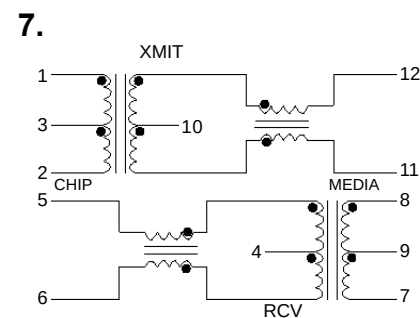
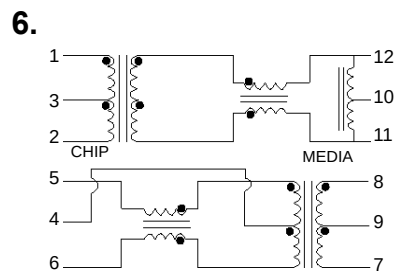
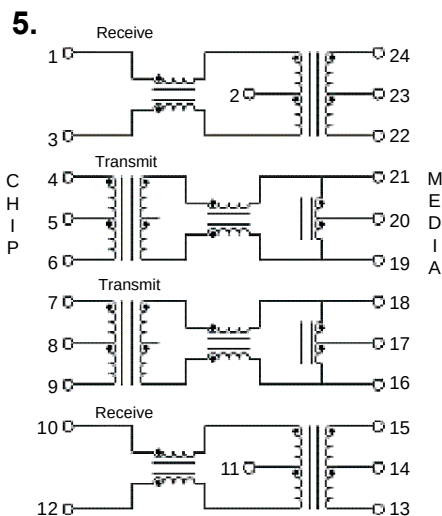
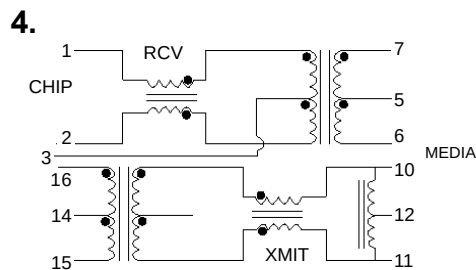
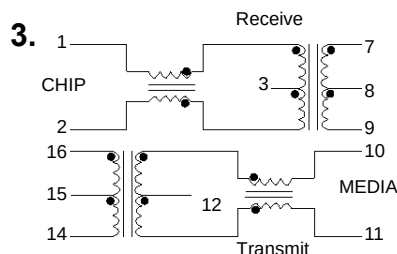
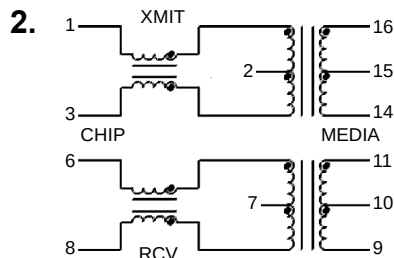
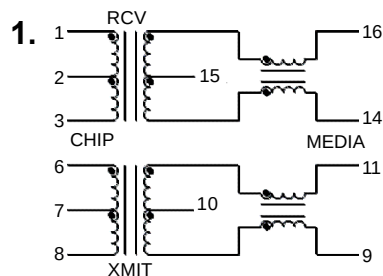
1. P/Ns with "T" as suffix are configured for through-hole applications

2. Dual port design configuration

3. Turns ratios are specified: "transceiver : media" with $\pm 2\%$ tolerance

4. "CT" indicates a center-tapped winding, otherwise readings are intended to be across entire winding segment

5. OCL for 10/100Base-T and Gigabit applications is specified at: 350 μ H min with 8 mA bias measured from the media interface and -40°C to 85°C



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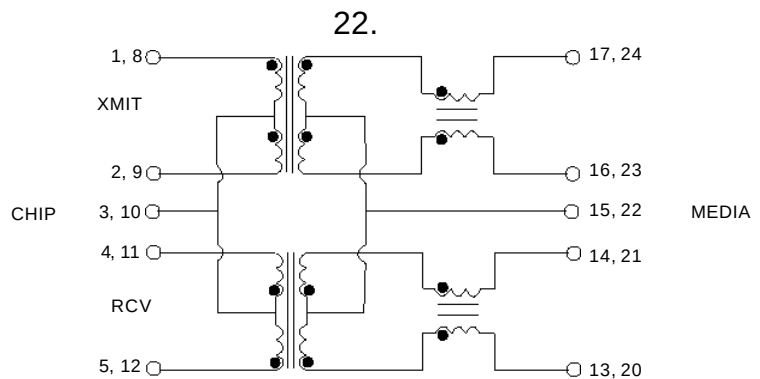
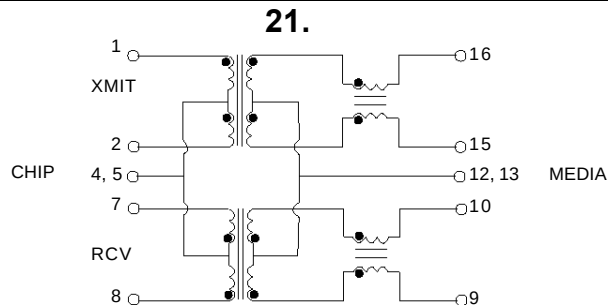
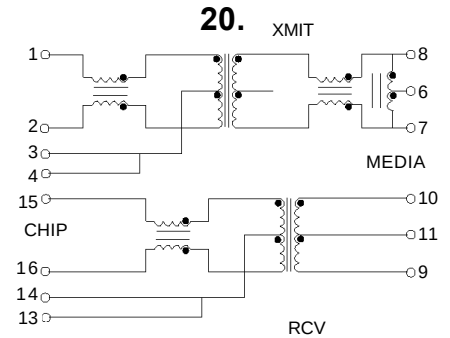
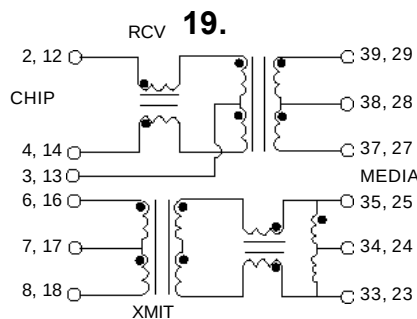
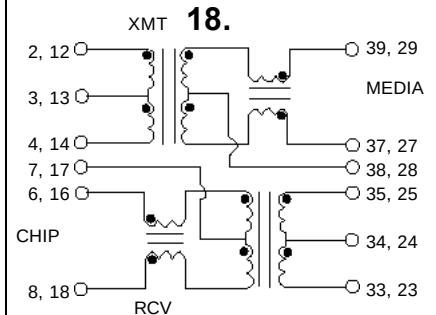
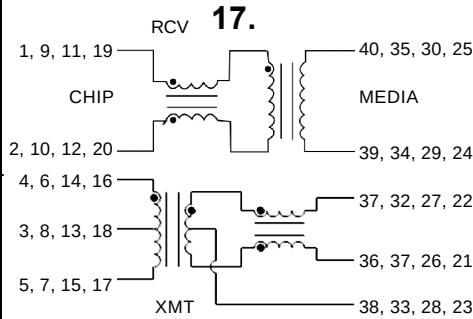
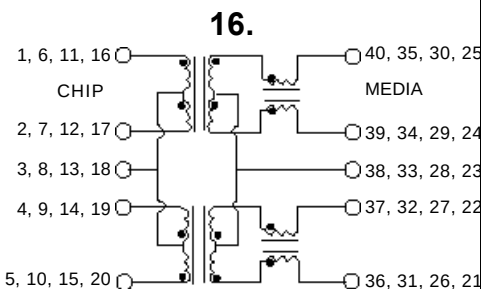
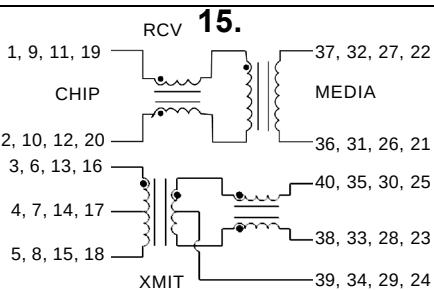
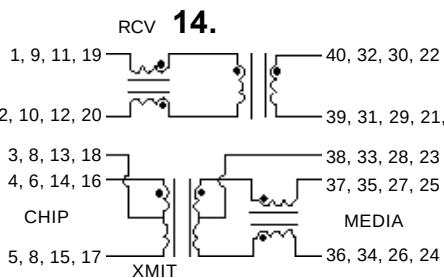
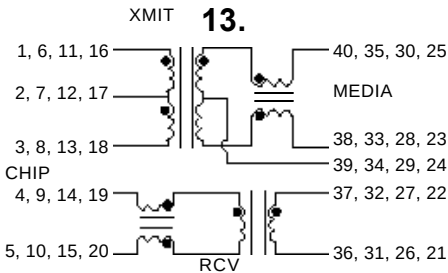
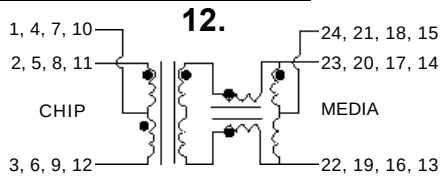
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CIRCUITS:



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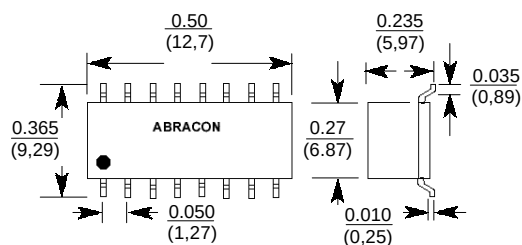
PACKAGES

NOTES:

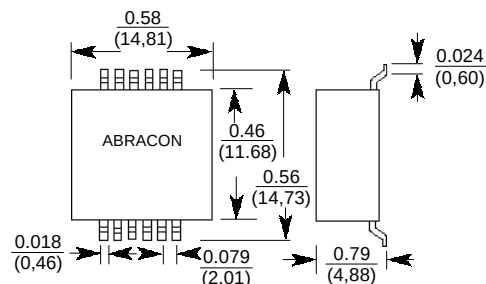
7. Dimensions: inches / mm; see spec sheet for tolerance limits

8. Specifications subject to change without notice

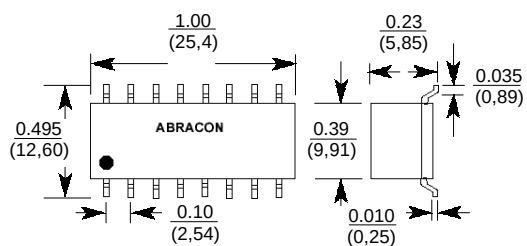
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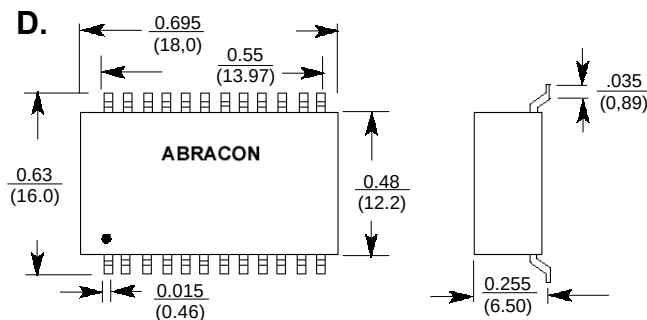
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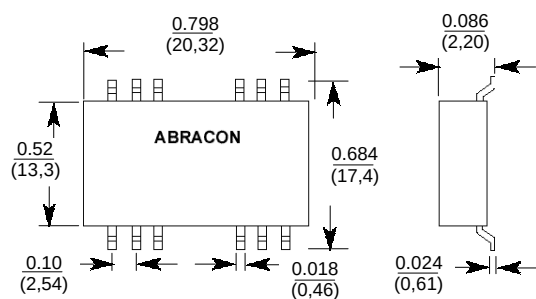
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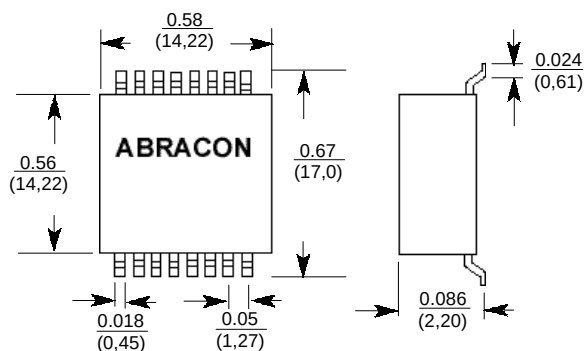
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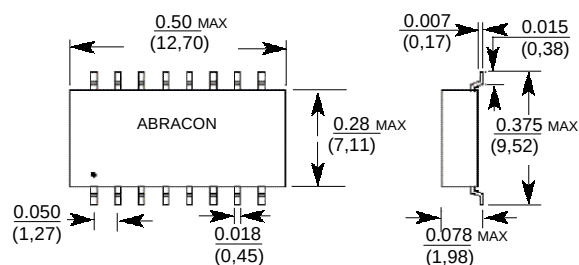
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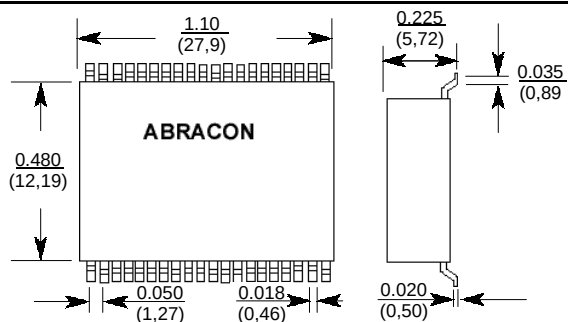
F.



G.



H.



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