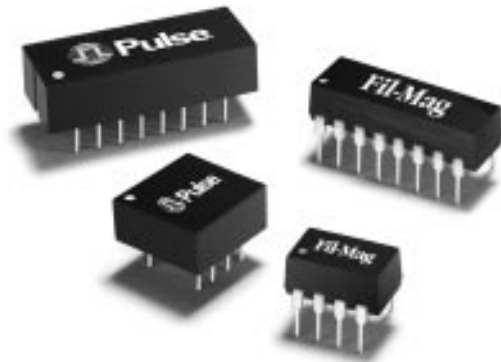


TOKEN RING THROUGH HOLE ISOLATION TRANSFORMERS

Designed for 4 and 16 Mbps Applications



- IEEE 802.5 compatible
- Single and dual low profile packages
- Proven reliable designs
- Recommended by Texas Instruments since 1984

Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C

Part Number	Turns Ratio (±5%)	Sine Wave Inductance OCL (μH MIN)	RiseTime (ns MAX)	Interwinding Capacitance C _{WW} (pF MAX)	Leakage Inductance L _L (μH max)	DC Resistance DCR (Ω MAX)	
	A:B:C:D					Pri	Sec
PE-63838-001	1:1:2:2	500 ²	15	20 ³	0.7 ³	.40	.80
PE-65871	1:1:1:1	500 ¹	9	20 ¹	0.2 ¹	.25	.25
PE-64974-001	1:1:1:1	2600 ²	15	30 ¹	0.5 ¹	1.0	1.0
PE-67541	1:1:1:1	1200 ²	—	—	—	1.0	1.0
PE-67537	1:1:2:2	900	—	—	—	.50	1.2
23Z110	1:1:2:2 (±2%)	75 (±30%)	3.0	14	0.3	.20	.40
23Z111	1.22:1.22:1:1	100 (±20%)	3.0	10	0.2	.30	.30
23Z112	1:1:2:2 (±7%)	75 (±30%)	3.0	14	0.3	.20	.40
23Z379	See schematic (±2%)	242 (±30%)	3.0	20	0.6	.60	.60
23Z806	1:1:1:1 (±3%)	750	5.0	25	0.2	1.00	1.00
23Z807	See schematic (±3%)	225	5.0	15	0.3	.40	.40

Electrical Specifications @ 25°C — Operating Temperature 0°C to 70°C (continued)

Part Number	Return Loss ⁴ (dB MIN)		Insertion Loss ⁴ (dB MAX)		Crosstalk (dB MIN)		Package	Hipot (Vrms)
	1-17 MHz	17-25 MHz	16 MHz	24 MHz	16 MHz	24 MHz		
PE-63838-001	-15 ^{4, 5}	—	-0.5 ^{4, 5}	-0.8 ⁴	—	—	Single	500
PE-65871	-15 ^{4, 5}	—	-0.5 ^{4, 5}	-0.8 ⁵	—	—	Single	600
PE-64974-001	-15	—	—	—	—	—	Dual	750
PE-67541	-16	-14	-0.6	-0.8	-40	-40	Dual	750
PE-67537	-18	-14	-0.5	-0.6	—	—	Single	600
23Z110	—	—	—	—	—	—	Single	2000
23Z111	—	—	—	—	—	—	Single	2000
23Z112	—	—	—	—	—	—	Dual	2000
23Z379	—	—	—	—	—	—	Single	500
23Z806	—	—	—	—	—	—	Dual	500
23Z807	—	—	—	—	—	—	Dual	2000

Notes:

- Measured at 20 mVrms, 100 KHz.
- Measured at 20 mVrms, 10 KHz.
- Measured at 50 mV, 100 KHz.
- 100 Ω
- Insertion Loss is 0.5 dB MAX from 1-16 MHz. Return Loss is 15 dB MIN from 10-16 MHz and 20 dB MIN from 1-5 MHz.

TOKEN RING THROUGH HOLE ISOLATION TRANSFORMERS

Designed for 4 and 16 Mbps Applications

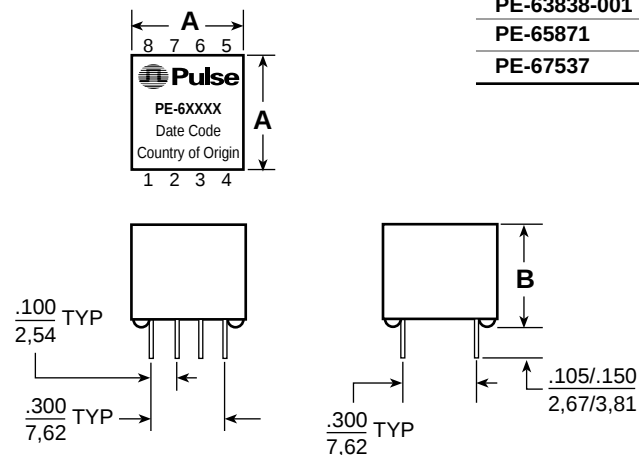


Mechanicals

Schematics

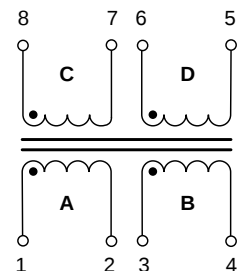
PE-63838-001, PE-65871, PE-67537

Single Package



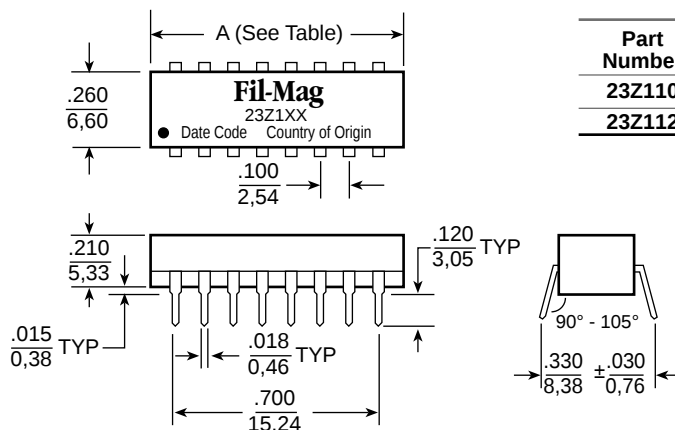
Part Number	Dimension A (MAX)	Dimension B (MAX)
PE-63838-001	.500/12,70	.370/9,40
PE-65871	.500/12,70	.265/6,73
PE-67537	.390/9,91	.300/7,62

Weight1.8 grams
 Tube40/tube
 Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are $\pm .010$
 0,25



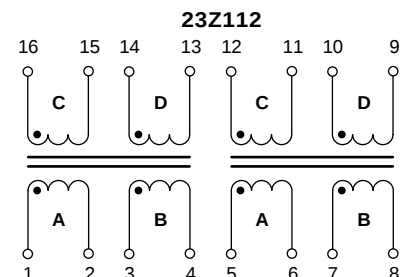
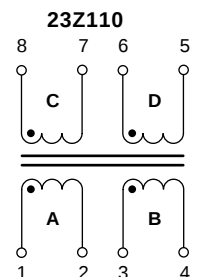
23Z110, 23Z112

Single and Dual Package



Part Number	Pins	Dimension A (MAX)
23Z110	8	.500/12,70
23Z112	16	.810/20,57

23Z110 23Z112
 Weight0.8 grams1.6 grams
 Tube50/tube20/tube
 Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are $\pm .010$
 0,25



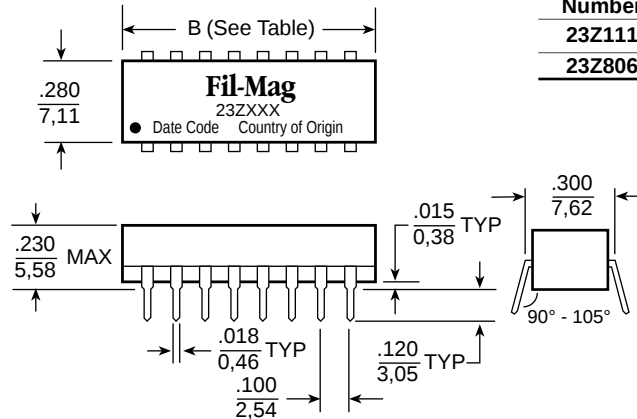
TOKEN RING THROUGH HOLE ISOLATION TRANSFORMERS

Designed for 4 and 16 Mbps Applications

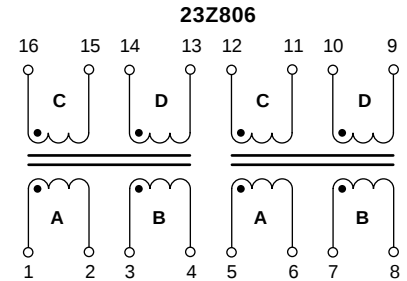


Mechanicals

Schematics

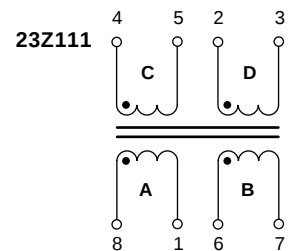
23Z111, 23Z806 Single and Dual Package

Part Number	Pins	Dimension B (MAX)
23Z111	8	.500/12,70
23Z806	16	.810/20,57

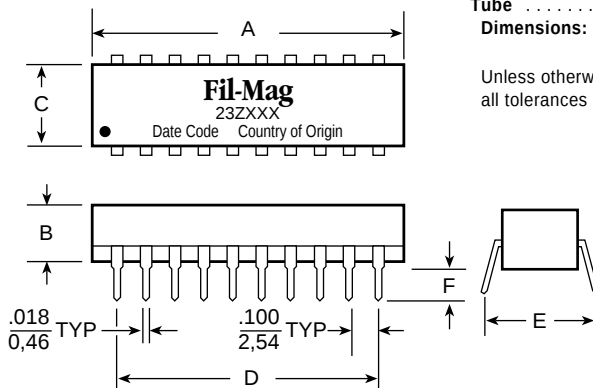


	23Z806	23Z111
Weight	1.8 grams	.0.90 grams
Tube	.28/tube	.50/tube
Dimensions:	Inches	
	mm	

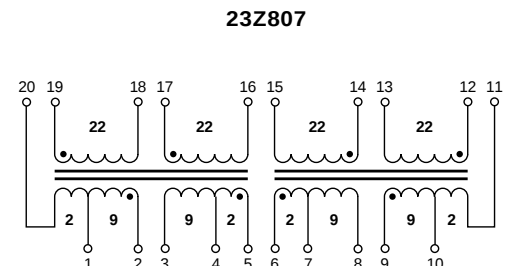
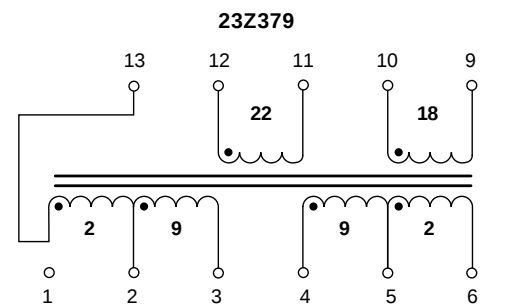
Unless otherwise specified,
all tolerances are $\pm$ $\frac{.010}{0.25}$

**23Z379, 23Z807** Single and Dual Package

Part Number	Pins	Dimension A (MAX)	Dimension B (MAX)	C	D	E	F (TYP)
23Z379	14	.800/20,32	.250/6,35	.285/7,24 ±.005/0,13	.600/15,24	.340/8,64 ±.020/0,51	.125/3,18
23Z807	20	1.000/25,40	.200/5,08	.250/6,35 ±.010/0,25	.900/22,86	.330/8,38 ±.030/0,76	.125/3,18 ±.020/0,51



	232379	232807
Weight	1.3 grams	1.9 grams
Tube	.28/tube	.20/tube
Dimensions:	<u>Inches</u>	
	<u>mm</u>	
Unless otherwise specified,		
all tolerances are $\pm .010$		
<u>0.25</u>		



TOKEN RING THROUGH HOLE ISOLATION TRANSFORMERS

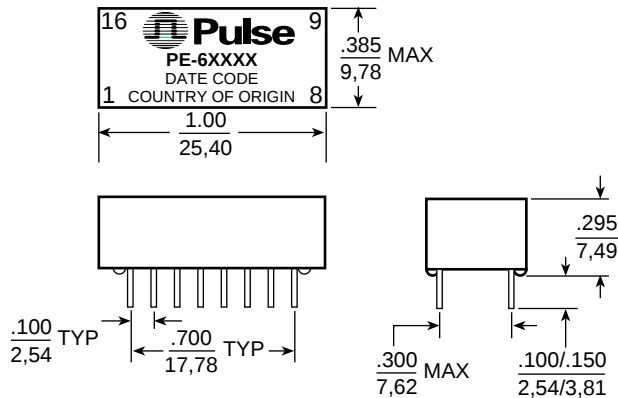
Designed for 4 and 16 Mbps Applications



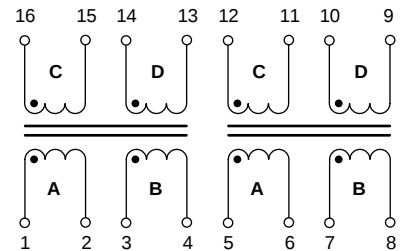
Mechanical

Schematic

PE-64794-001, PE-67541 Dual Package



Weight 3.1 grams
 Tube20/tube
 Dimensions: Inches
 mm
 Unless otherwise specified,
 all tolerances are $\pm .010$
 0,25

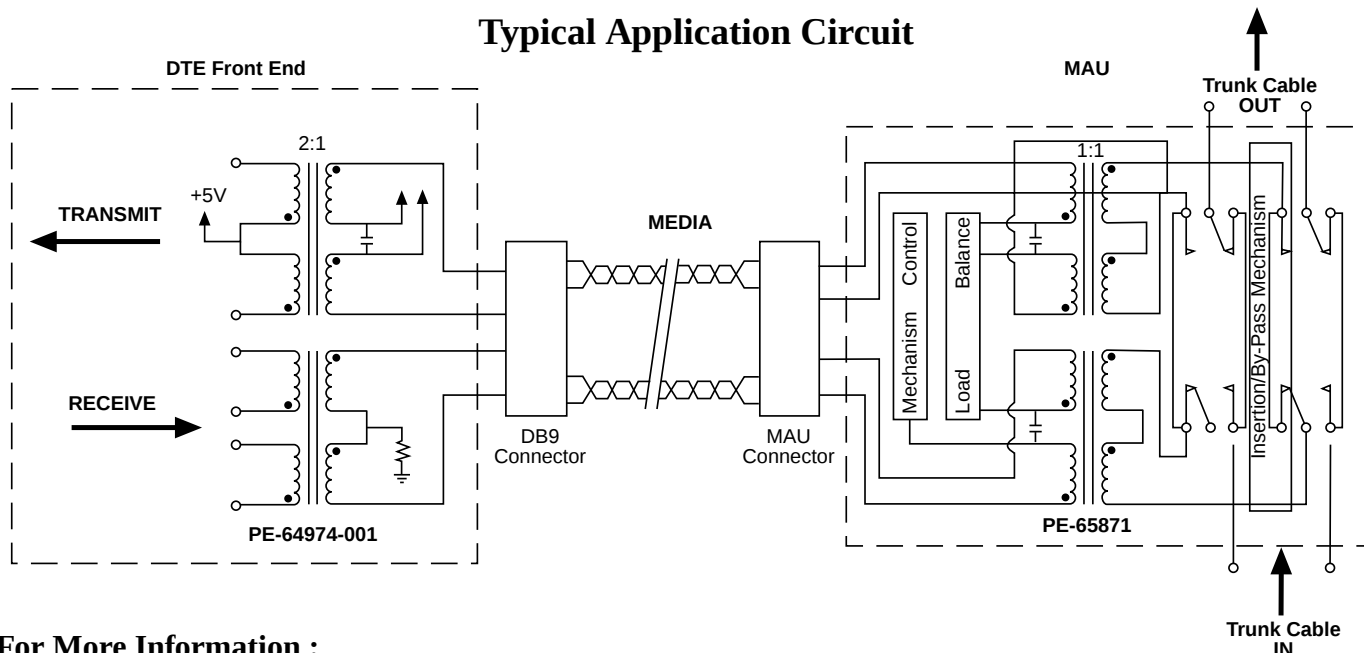


Application

These transformers are specifically designed for use in IEEE 802.5 Token Ring applications at either 4 Mbps or 16 Mbps data rates. The varying turns ratios allow the product to be used in either DTE or MAU applications. Single and dual package options provide further flexibility for board layouts.

The 23Z111 and 23Z379 can provide 100 Ω to 150 Ω impedance transformation. The PE-63838-001, PE-67537, 23Z110, 23Z112, 23Z379, and the 23Z807 can provide 600 Ω to 150 Ω conversion. The 23Z111 and 23Z807 provide taps for 100 Ω and 150 Ω outputs.

Typical Application Circuit



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Distributor

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