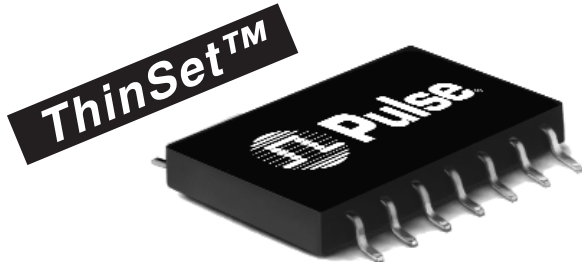





# LOW-PROFILE SURFACE MOUNT 10BASE-T INTERFACE MODULES

Ideal for Type I or Type II PCMCIA Applications



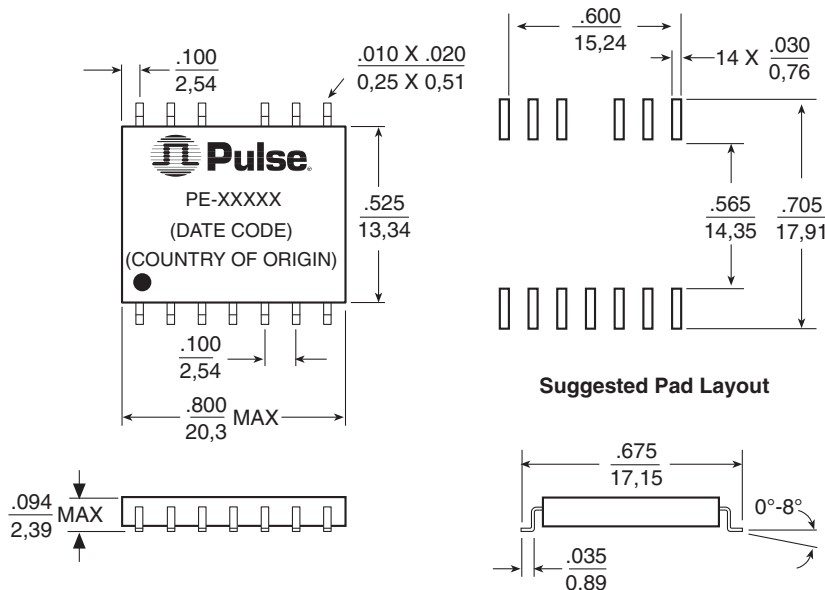
-  Designed to exceed IEEE 802.3i-1993 10Base-T specifications
-  Improved EMI performance for FCC and CISPR Class B certification
-  235°C peak IR Reflow temperature rating

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

Part Number	Insertion Loss (dB MAX)	Attenuation (XMT) (dB MIN)			Return Loss (dB MIN)	Crosstalk (dB MIN)	Common Mode Rejection (XMT) (dB MIN)				Hi-pot (Vrms MIN)
		1-10 MHz	30 MHz	50 MHz			100 MHz	5-10 MHz	5-10 MHz	10 MHz	
PE-68030	-5.0	-30	-35	-40	-18	-50	-60	-45	-45	-30	2000
PE-68032	-1.2	-35	-35	-40	-18	-50	-60	-40	-35	-30	2000
PE-68033	-5.0	-30	-30	-35	-18	-50	-60	-45	-35	-30	2000
PE-68034	-5.0	-35	-35	-40	-18	-50	-55	-40	-35	-30	2000
PE-68035	-5.0	-35	-35	-40	-18	-50	-55	-45	-35	-30	2000
PE-68036	-5.0	-30	-30	-40	-18	-50	-55	-40	-35	-30	2000
PE-68054	-5.0	-30	-30	-40	-18	-50	-55	-40	-35	-30	2000

\* Test includes pre-distortion resistors which reflect additional attenuation.

## Mechanical



Weight ..... 1.5 grams  
 Tape & Reel ..... .600/reel  
 Tube ..... .25/tube  
 Dimensions:  $\frac{\text{Inches}}{\text{mm}}$

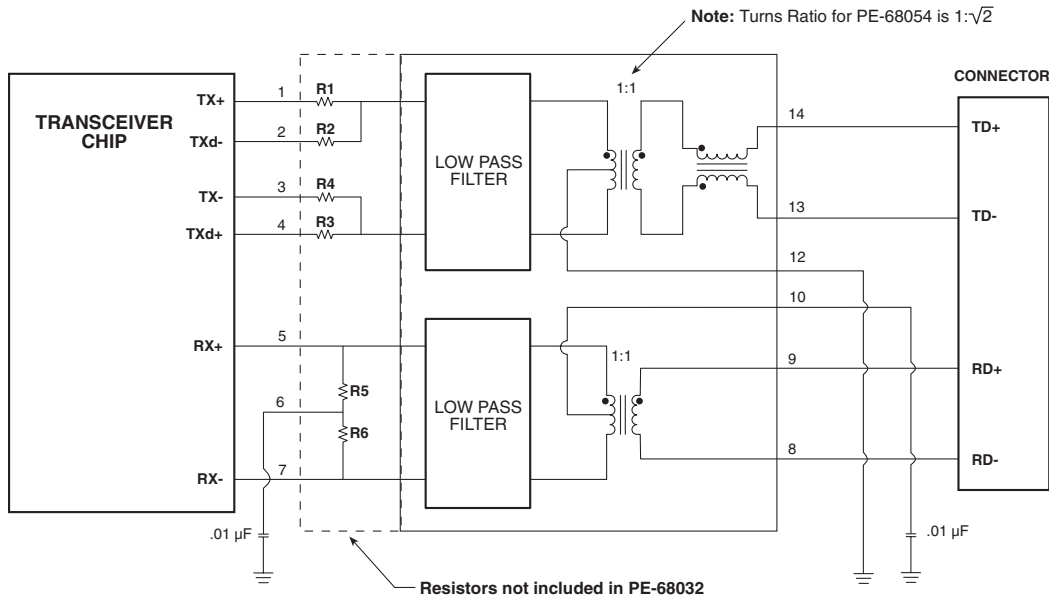
Unless otherwise specified  
 all tolerances are  $\pm \frac{.010}{0,25}$

# LOW-PROFILE SURFACE MOUNT 10BASE-T INTERFACE MODULES

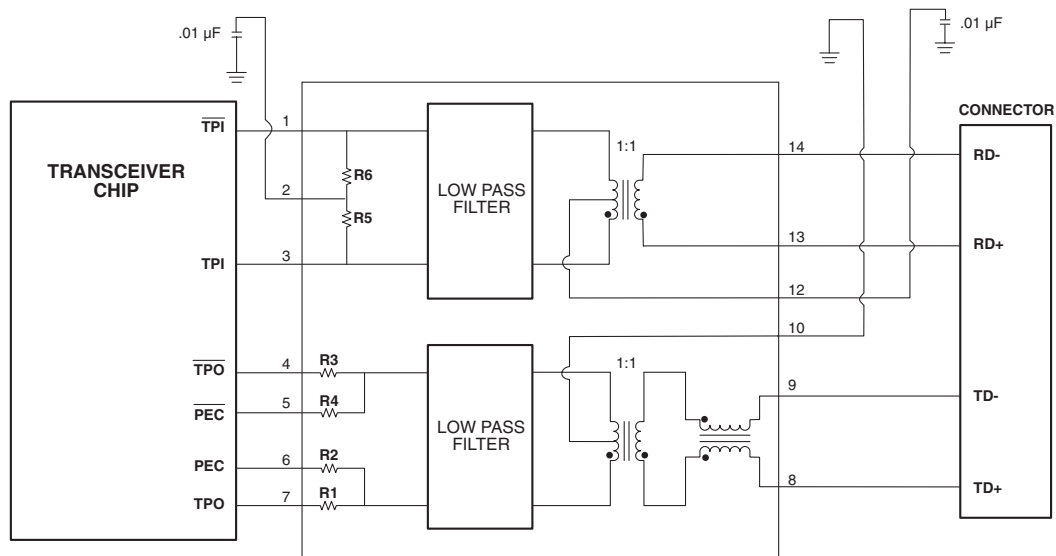


Ideal for Type I or Type II PCMCIA Applications

Application Circuit – A  
PE-68032 or PE-68035 or PE-68054



Application Circuit – B  
PE-68030 or PE-68036

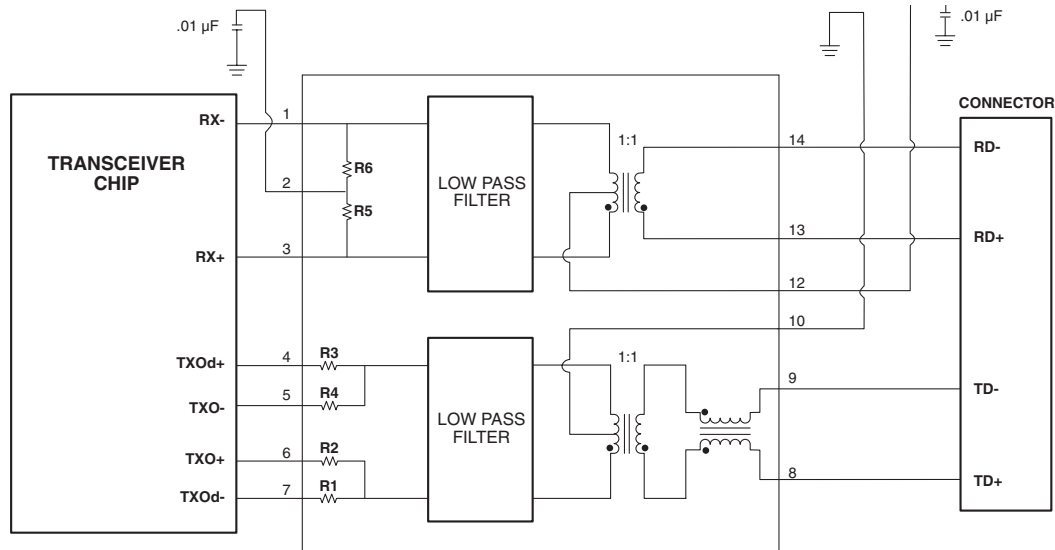


# LOW-PROFILE SURFACE MOUNT 10BASE-T INTERFACE MODULES

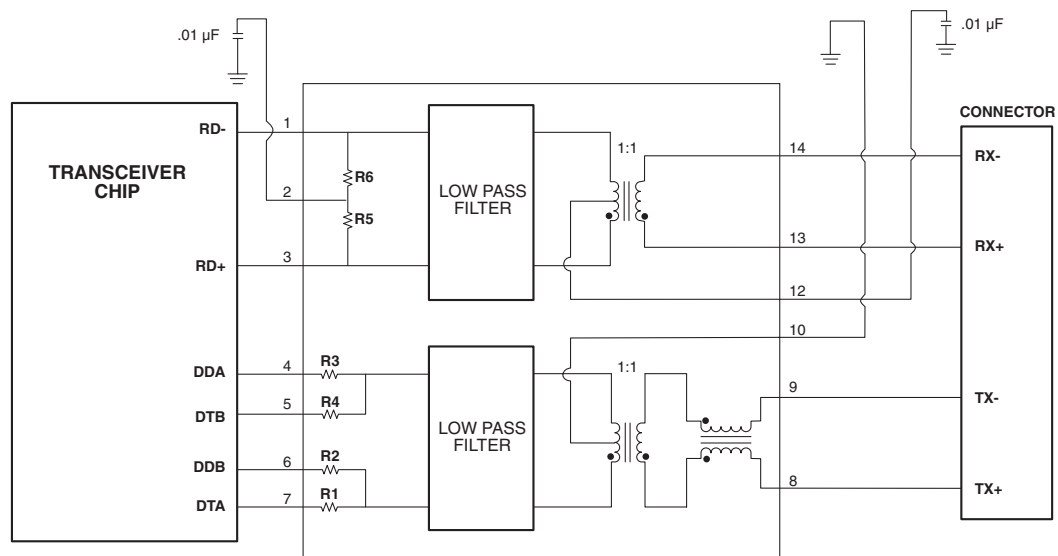
Ideal for Type I or Type II PCMCIA Applications



Application Circuit – C  
PE-68034



Application Circuit – D  
PE-68033



# LOW-PROFILE SURFACE MOUNT 10BASE-T INTERFACE MODULES



Ideal for Type I or Type II  
PCMCIA Applications

## Resistor Chart

Product Number	Resistor Number	Resistor Value	IC	IC Number	Application Circuit
PE-68030	R1, R3	53.6 $\Omega$ $\pm$ 1%	AT&T	T7232	B
	R2, R4	316 $\Omega$ $\pm$ 1%			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			
PE-68032	NONE	N/A	Most	N/A	A
PE-68033	R1, R4	68.1 $\Omega$ $\pm$ 1%	Symbios Logic	NCR92C02A NCR92C350	D
	R2, R3	287 $\Omega$ $\pm$ 1%			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			
PE-68034	R1, R3	287 $\Omega$ $\pm$ 1%	National	DP83902VJG DP83934	C
	R2, R4	68.1 $\Omega$ $\pm$ 1%			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			
PE-68035	R1, R4	53.6 $\Omega$ $\pm$ 1%	AMD	AM79C96A AM79C940	A
	R2, R3	316 $\Omega$ $\pm$ 1%			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			
PE-68036	R1, R3	47.5 $\Omega$ $\pm$ 1%	Motorola	MC68160	B
	R2, R4	N/A			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			
PE-68054	R1, R4	20 $\Omega$ $\pm$ 1%	DEC	21040	A
	R2, R3	133 $\Omega$ $\pm$ 1%			
	R5, R6	49.9 $\Omega$ $\pm$ 1%			

## Application

Pulse's ThinSet™ 10Base-T modules are the optimum analog solution for PCMCIA applications. Primary design features include electrical functions, mechanical packaging and process standards.

### Electrical Functions

- Impedance Matching • Equipment Isolation • EMI suppression

Each module contains low pass filters, isolation transformers, and common mode chokes. Most also include pre-emphasis and impedance matching resistors. Please refer to the appropriate application circuit and resistor chart for specific configurations.

### Mechanical Packaging

- Dimensions • External Features • Internal Construction

The low .094" profile allows for use in both Type I and Type II applications. ThinSet™ modules are highly integrated to keep a compact form factor for improved thermal management. Compliant leads provide excellent solder-joint reliability with  $\pm$ .002" coplanarity. Advanced mechanical design yields more consistent and repeatable electrical performance.

### Process Standards

- SMT requirements • Quality Assurance • Construction Methods

Materials, resistant to high temperatures, have been selected for thermal compatibility to comply with industry standard reflow methods. Post dipping the leads helps ensure solderability to the PC board. Improved construction techniques increase package reliability in high stress environments.

### Note:

Modules are packaged in tubes unless tape and reel is specified. Please add the suffix "T" (i.e. PE-68030T) for tape and reel orders, increments of 600 pieces.

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### DISTRIBUTOR

Performance warranty of products offered on this data sheet is limited to the parameters specified. Data is subject to change without notice.

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