

# T3/DS3/E3/STS-1 TRANSFORMERS

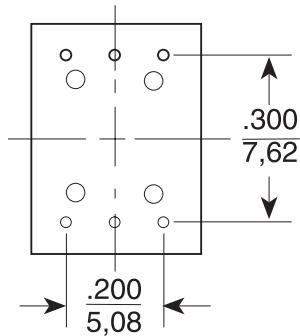
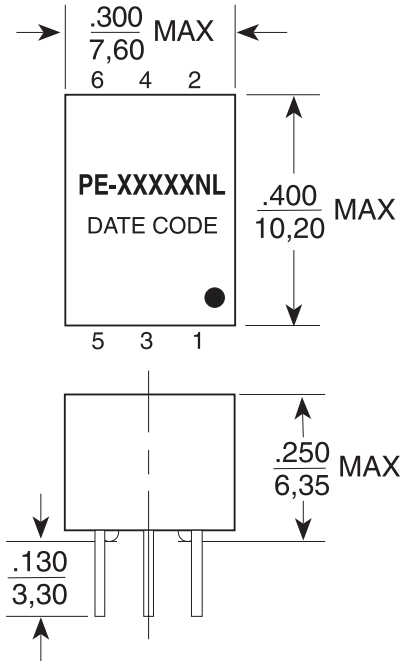
Designed for T3, DS3, E3 and STS-1 Interfaces



## Mechanicals

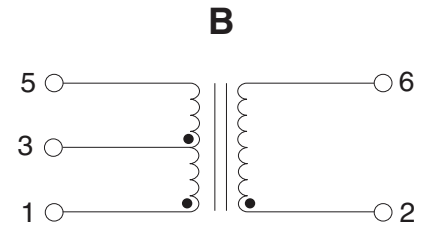
## Schematics

QC-1

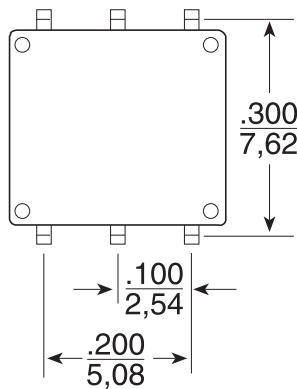
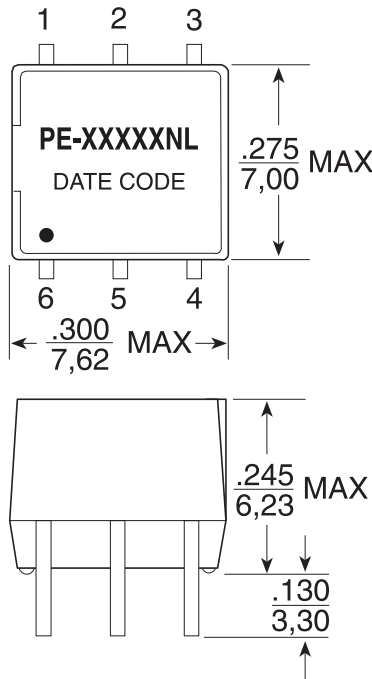


Leads are 22 AWG solderable.

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

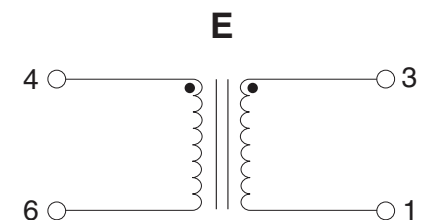
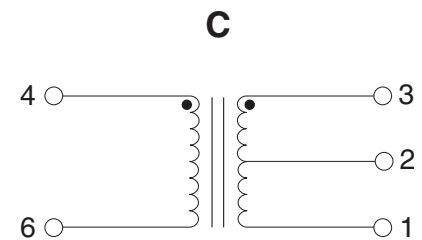


LC-1



Leads are:  $.010$  (0,25) X  $.020$  (0,51) solderable.

Dimensions:  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$



# T3/DS3/E3/STS-1 TRANSFORMERS

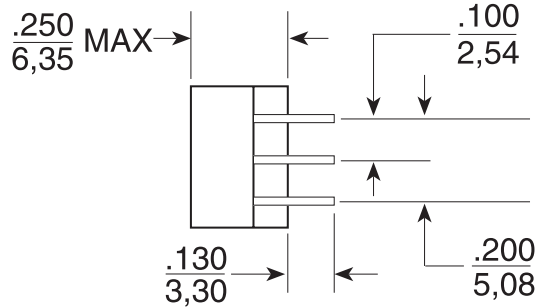
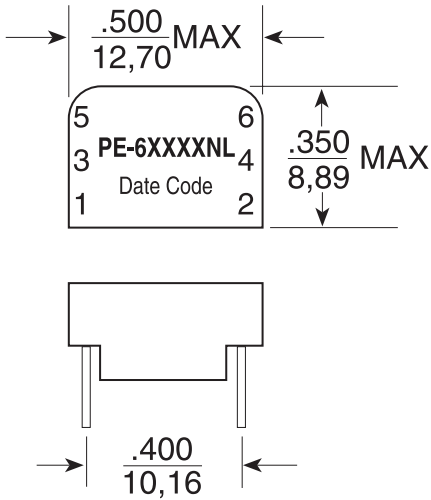
Designed for T3, DS3, E3 and STS-1 Interfaces



## Mechanicals

## Schematics

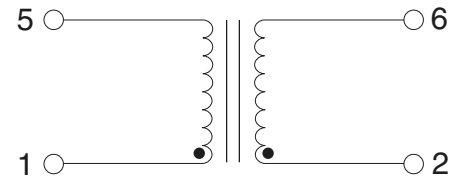
### HC-1



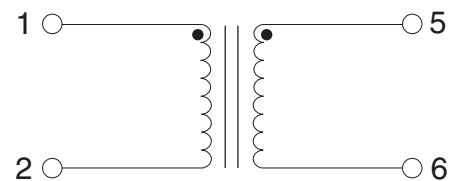
**Notes:** Leads are 24 AWG solderable.  
Unused pins not provided.

**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

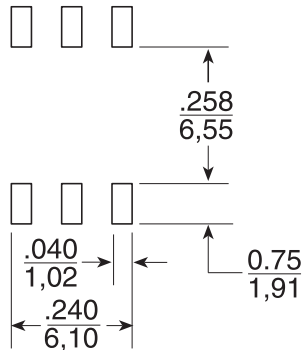
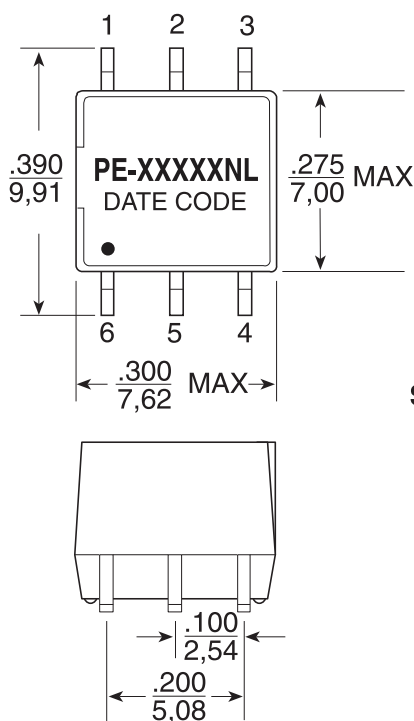
### A



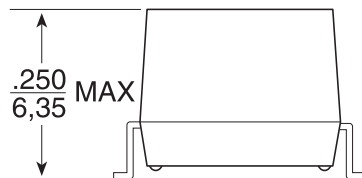
### 1S



### LS-1

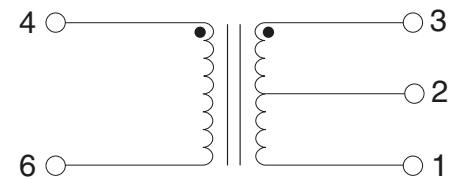


### SUGGESTED PAD LAYOUT

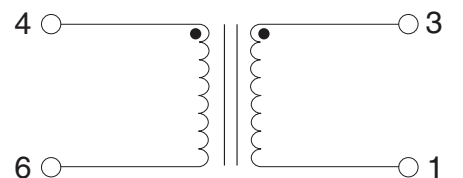


**Dimensions:**  $\frac{\text{Inches}}{\text{mm}}$  Unless otherwise specified, all tolerances are  $\pm \frac{.010}{0,25}$

### C



### E



# T3/DS3/E3/STS-1 TRANSFORMERS

Designed for T3, DS3, E3 and STS-1 Interfaces

Transformer Selection Guide							
Chip Manufacturer	IC	Surface Mount		Through Hole (1500 VRMS)		Through Hole (3000 VRMS)	
		Transmit	Receive	Transmit	Receive	Transmit	Receive
Lucent	T7296	PE-65967NL	-	PE-65966NL	-	PE-68629NL	-
Exar	XR-T7296	PE-65967NL	-	PE-65966NL	-	PE-68629NL	-
Silicon Systems	SSI 78P236, DS3	PE-65968NL	PE-65967NL	PE-65969NL	PE-65966NL	-	PE-68629NL
	SSI 78P7200, DS3	PE-65968NL	PE-65967NL	PE-65969NL	PE-65966NL	-	PE-68629NL
	SSI 78P7200, E3	PE-65968NL	PE-65968NL	PE-65969NL	PE-65966NL	-	-
	SSI 78P2361, STS-1	PE-65968NL	PE-65967NL	PE-65969NL	PE-65966NL	-	PE-68629NL
	SSI 78P2362, E3	PE-65968NL	PE-65967NL	PE-65969NL	PE-65966NL	-	PE-68629NL
Transwitch	MRT TXC-02050 E3	PE-65968NL	PE-65967NL	PE-65969NL	PE-65966NL	-	PE-68629NL
	ART 02020 DS3, STS-1	PE-65967NL	PE-65967NL	PE-65966NL	PE-65966NL	PE-68629NL	PE-68629NL

## Application Notes

- The transformers have been developed for use as transmit and receive transformers in T3 or DS3 links, using bit rates of 44.736 Mbps and B3ZS coding on coaxial cable. The characteristics allow compliance with the Pulse templates of CCITT G.703 as well as ATT T.A.34. The transformers are also suitable for E3 interfaced at 34.368 Mbps with HDB3 coding or STS-1 applications, at 51.84 Mbps according to Bellcore TA-NWT-000253. The LC-1 and QC-1 packages are pin-compatible with T1-1 and T4-1 6-pin DIP packages.
- Bandwidth specifications are typical in a 75  $\Omega$  system. Return loss meets the requirements of G.703. Materials used in the products are UL94-VO recognized. Products meet the requirements of IEC 695-2-2 (Needle Flame Test).
- The surface mount LS-1 package is available with optional Tape & Reel packaging. To order, add a "T" suffix to the part number (e.g. PE-65967NL<sup>T</sup>).
- The Transwitch MRT TXC-02050 chip is also designed to operate in 6.312 and 8.448 Mbps interfaces. A 1:1 transformer (PE-64934) is recommended.

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