



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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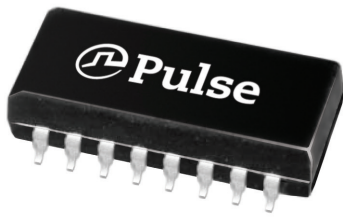
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Copperhead™ High Speed Dual Transformers

Ruggedized



- ✔ Compliant with ANSI X3T111, Fiber Channel, FC-PH-3 for quarter/full speed applications, SMPTE, IEEE1394 Firewire
- ✔ Moisture sensitivity: Level 3
- ✔ Pick and place compatible
- ✔ Peak temperature profile 250°C; NL parts peak temperature is 245°C
- ✔ AS9100 Certified (Based on and including ISO 9001:2000)

Electrical Specifications @ 25°C — Operating Temperature -55°C to +125°C

Part Number	Turns Ratio (±5%)	Primary Inductance (µH MIN)	Rise Time @ 20% to 80% (pS MAX)	DC Resistance (Ω MAX)	Hi-Pot (Vrms MIN)	Insertion Loss (dB MAX)	Application Nominal Bit Rate (Mbaud)
T-330SCT	1CT:1CT	26 @ 1Vrms, 100kHz	350	0.2	1,500	-1.5 @ 15-165MHz	265.6 (1/4 speed)
T-531SCT	1CT:1CT	7.5@1Vrms, 100kHz	325	0.2	1,500	-2.0 @ 50-265MHz	531 (half speed)
T-1062SCT	1CT:1CT	3.75@1Vrms, 100kHz	280	0.2	1,500	-2.0 @ 100-531MHz	1,062.5 (full speed)
T-1250SCT	1CT:1CT	3.75@1Vrms, 100kHz	280	0.2	1,500	-2.0@125-650MHz	1,250
T-1485SCT	1CT:1CT	3.75@1Vrms, 100kHz	270	0.2	1,500	-2.0	1,485 (SMTPE)
T-3200SCT	1:1	0.70	200	0.2	1,500	-4.5	3,200

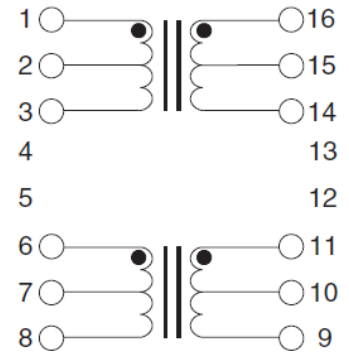
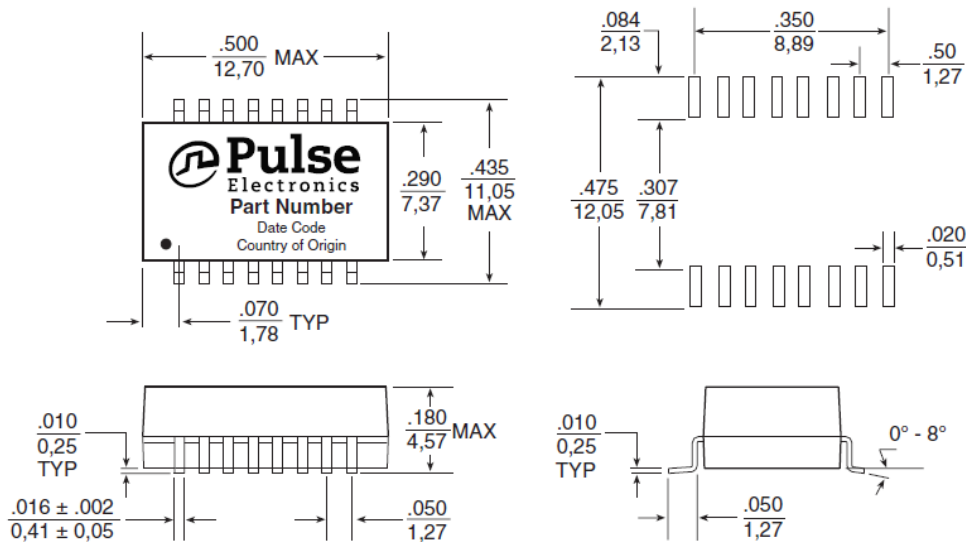
NOTES:

- To order a RoHS compliant part, add the suffix "NL" to the part number, i.e. T-330SCT becomes T-330SCTNL.
- Add suffix "T" to part number for Tape & Reel package (i.e. T-330SCTT).

Mechanical

Schematic

T-330SCT, T-531SCT, T-1062SCT, T1250SCT and T-1485SCT

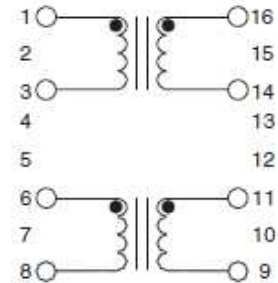
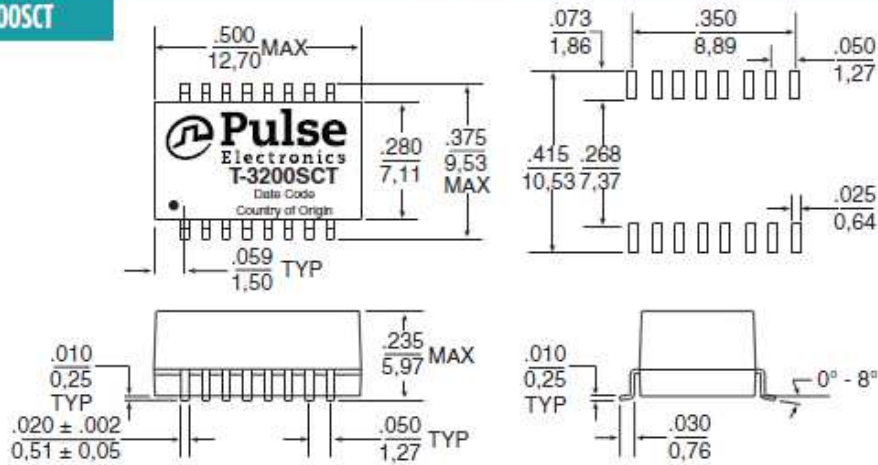


Weight 1.0 grams
 Tape & Reel 400/reel
 Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified,
 all tolerances are $\pm \frac{.005}{0,13}$

Mechanical

Schematic

T-3200SCT



Weight 1.0 grams
 Tape & Reel 600/reel
 Dimensions: $\frac{\text{Inches}}{\text{mm}}$
 Unless otherwise specified,
 all tolerances are $\pm \frac{.005}{0.13}$

Application

Pulse Specialty Components has designed Fibre Channel dual transformers specifically for point to point coupling to 150 twinax cable. The isolation transformers protect the station from static charges that may develop on the cable, and prevents ground loop currents from being transferred between stations. The devices have also been designed to provide common mode rejection within the transmission band and thus reduce EMI. The wide bandwidth of these

devices minimizes data dependent jitter by providing fast signal rise times. Low-end bandwidth also minimizes base-line wander, another contributor to jitter. The dual package allows connection of both transmit and receive channels, as shown in the application circuit below. Surface-mount packagin also allows a cost-effective solution.

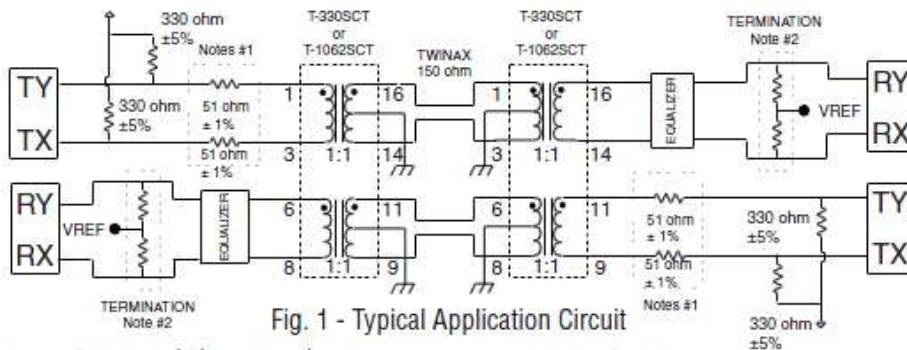
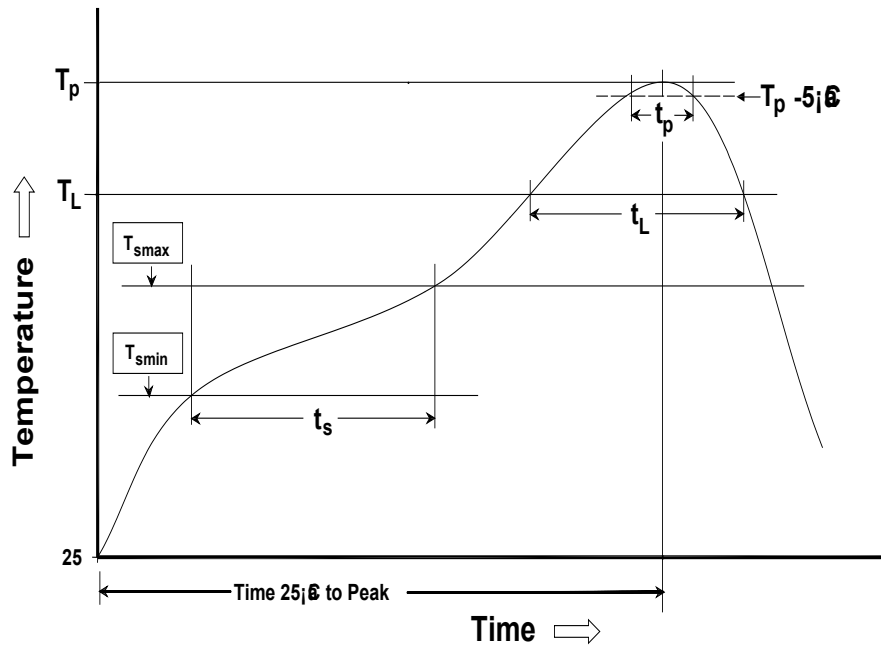


Fig. 1 - Typical Application Circuit

1. The transformer, 51 Ω resistors, and the impedance of the driver are matched to achieve the best return loss (S11) for the transmitter of the 150 Ω system.
2. The total impedance of termination resistor network is 150 Ω.
3. When laying out PCB, transmission line methods must be utilized to maintain return loss and signal integrity. Transformer must be located within .50 of the DB9

- connector.
4. It is recommended that the center tap (CT) of transformer(s), cable side, be connected to earth/chassis (cable shield) ground either directly or via a transient voltage suppressor (TVS) type component and earth/chassis ground should be "AC-coupled" to signal (digital) ground through a 0.27uF, 500v capacitor.

No Lead Recommended Reflow Profile (Based on J-STD-020D)

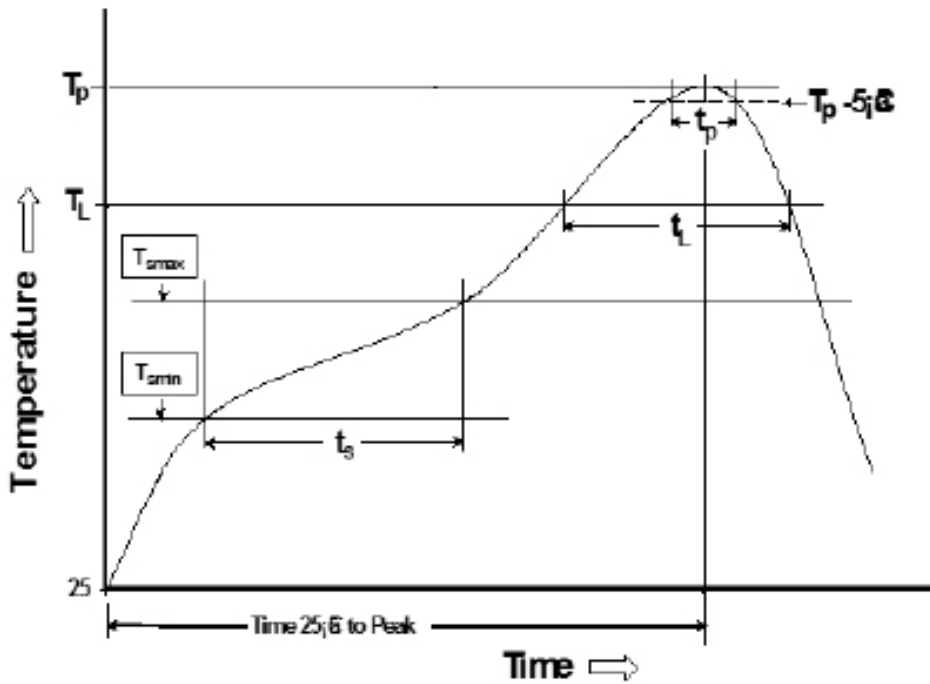


T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
150	200	217	245	60-120	60-150	30	3°C/s MAX	6°C/s MAX	480

Notes:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2.

Tin/Lead Recommended Reflow Profile (Based on J-STD-020D)



T_{SMIN} (°C)	T_{SMAX} (°C)	T_L (°C)	T_P (°C MAX)	t_s (s)	t_L (s)	t_p (s MAX)	Ramp-up rate (T_L to T_P)	Ramp-down rate (T_P to T_L)	Time 25°C to peak temperature (s MAX)
100	150	183	235	60-120	60-150	20	3°C/s MAX	6°C/s MAX	360

Notes:

1. All temperatures measured on the package leads.
2. Maximum times of reflow cycle: 2.

For More Information

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