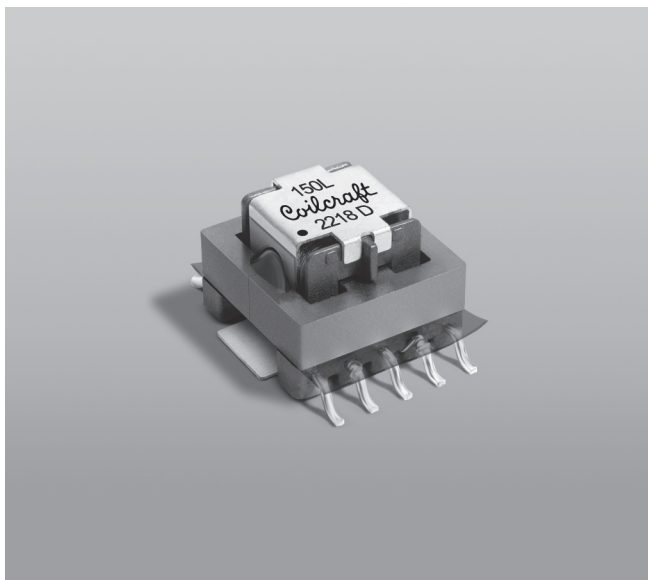




Current Sense Transformer CST2010V-150L



- High isolation voltage CST2010 current sense transformer
- AEC-Q200 qualified
- Sensed current up to 40 A
- Designed for use up to 1 MHz and above
- 2100 Vrms, one minute isolation (hipot) between windings
- Designed to comply with IEC61558-1, IEC62369-1, and IEC60664-1 for providing Reinforced or Basic Insulation⁷

Core material Ferrite

Terminations RoHS compliant tin-silver over tin over nickel over phos bronze (pins 2 - 4); RoHS compliant matte tin over nickel over copper (pins 11 - 12).

Weight 3.8 g

Ambient temperature -40°C to +125°C

Maximum part temperature +165°C (ambient + temp rise)

Storage temperature Component: -40°C to +165°C.

Tape and reel Packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

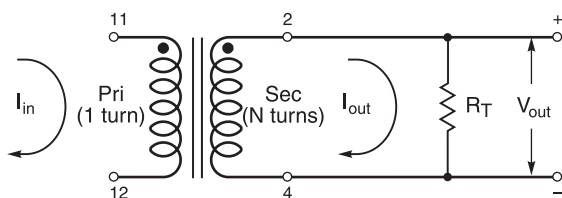
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Turns (N) pri:sec	Inductance ² ±30% (mH)	DCR max		Frequency (kHz)	Volt-time product ³ (Vμsec)	Sensed current I _{in} ⁴ (A)	Terminating resistance R _T ⁵ (Ohms)
			pri (mOhms)	sec (Ohms)				
CST2010V-150LD	1:150	19	0.36	3.6	1 - >1000	381.0	40	3.8

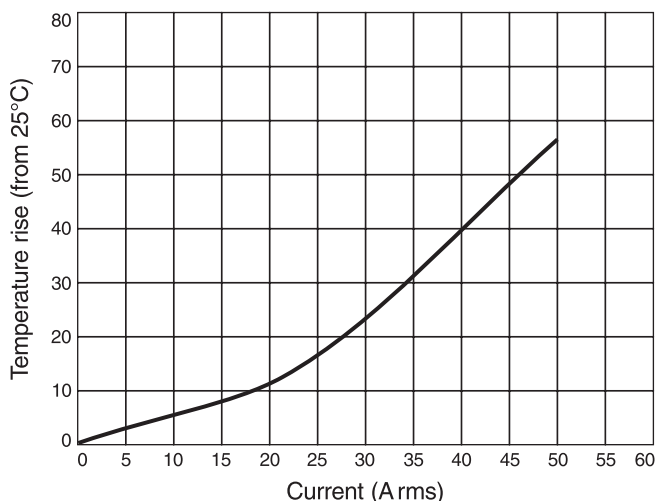
- Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (250 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
- Inductance measured between secondary pins at 1 kHz, 0.1 Vrms, 0 Adc.
- Volt-time product is for the secondary, between pin 2 and 4.
- Primary current of 40 A causes less than 40°C temperature rise from 25°C ambient. Higher current causes a greater temperature rise (see Temperature Rise vs Current curve).
- Terminating resistance (R_T) value is based on 1 Volt output with 40 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation:
 $R_T = V_{out} \times N_{sec} / I_{in}$
- Electrical specifications at 25°C.
- 5.5 mm creepage and 5.0 mm clearance to meet reinforced insulation for working voltage up to 136 V and basic insulation for working voltage up to 550 V with material group 3, pollution degree P2, OVCII, and altitude up to 2 km.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Typical Circuit



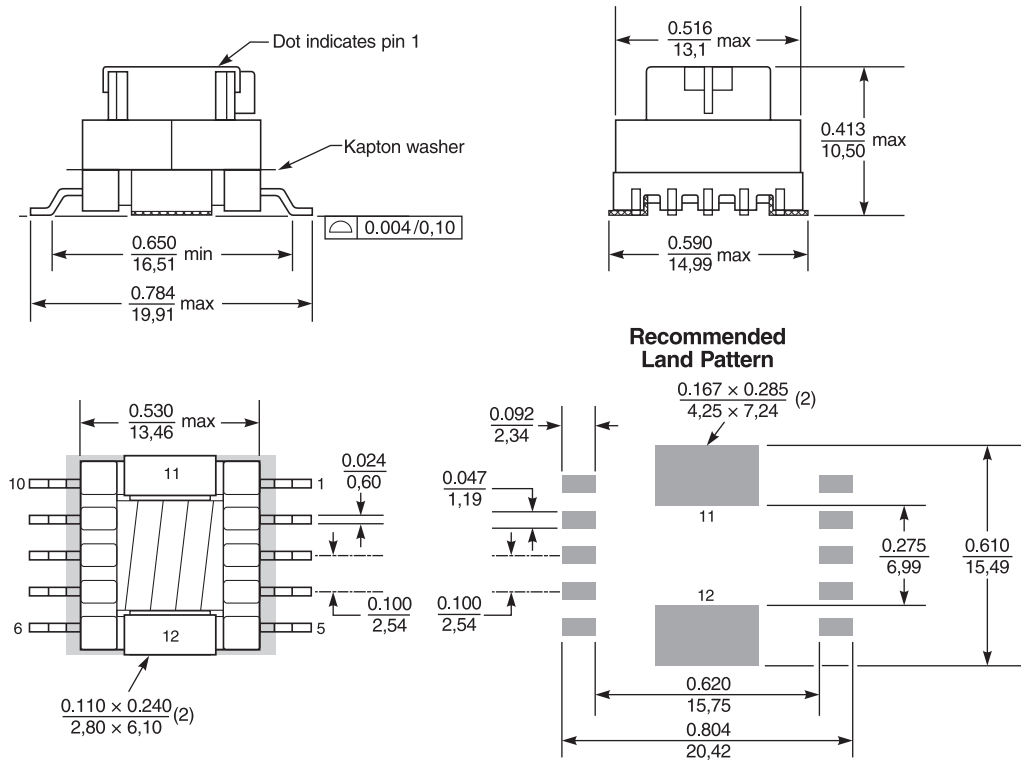
Temperature Rise vs Current





CST2010V-150L SMT Current Sense Transformer

Dimensions



Dimensions are in $\frac{\text{inches}}{\text{mm}}$

Packaging 250/13" reel; Plastic tape: 32 mm wide, 0.5 mm thick, 20 mm pocket spacing, 11.2 mm pocket depth