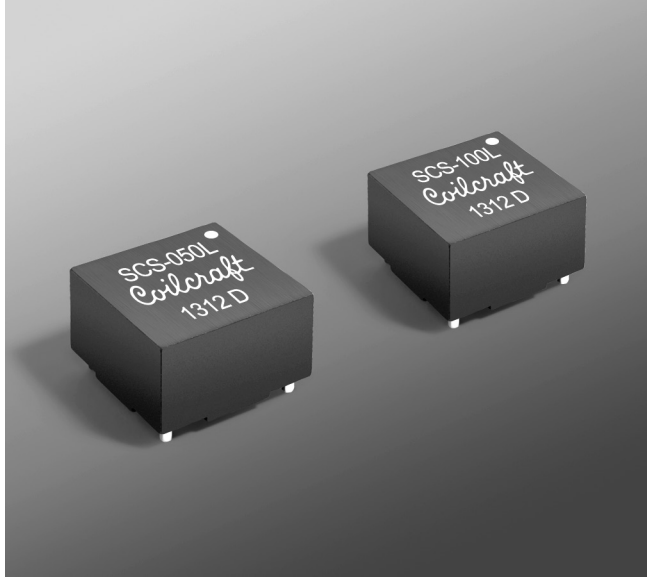




SMT Current Sense Transformer SCS Series



- Sensed current up to 30 A
- Frequency range up to 1 MHz
- 500 Vrms, one minute isolation (hipot) between windings.

Core material Ferrite

Terminations RoHS compliant matte tin over nickel over phos bronze

Weight 3.4 – 3.7 g

Ambient temperature –40°C to +125°C

Storage temperature Component: –40°C to +125°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF)

38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 200/13" reel Plastic tape: 32 mm wide, 0.5 mm thick, 24 mm pocket spacing, 3.0 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf

Part number ¹	Turns (N) pri:sec	Inductance ² min (mH)	DCR max ⁶ (Ohms)		Frequency range (kHz)	Volt-time product ⁴ (Vµsec)	Sensed current I _{in} ⁵ max (A)	Terminating resistance R _T ⁶ (Ohms)
			pri	sec				
SCS-050L_	1:50	3.8	0.0024	0.90	6 – 1000	80	30	1.7
SCS-100L_	1:100	14.8	0.0024	1.80	3 – 1000	160	30	3.3
SCS-200L_	1:200	59.2	0.0024	3.90	2 – 1000	320	30	6.7

1. When ordering, please specify **packaging** code:

SCS-200LD

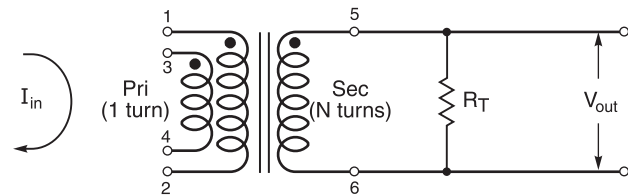
Packaging: D = 13" machine-ready reel. EIA-481 embossed plastic tape (200 parts per full reel).

B = Less than full reel. In tape, but not machine ready.
To have a leader and trailer added (\$25 charge), use code letter C instead.

- Inductance measured between secondary pins at 10 kHz, 0.06 Vrms, 0 Adc.
- Primary DCR is measured with the windings connected in parallel.
- Maximum volt-time product is for the secondary, based on 2000 Gauss.
- Primary current of 30 A causes less than 25°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 30 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.

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

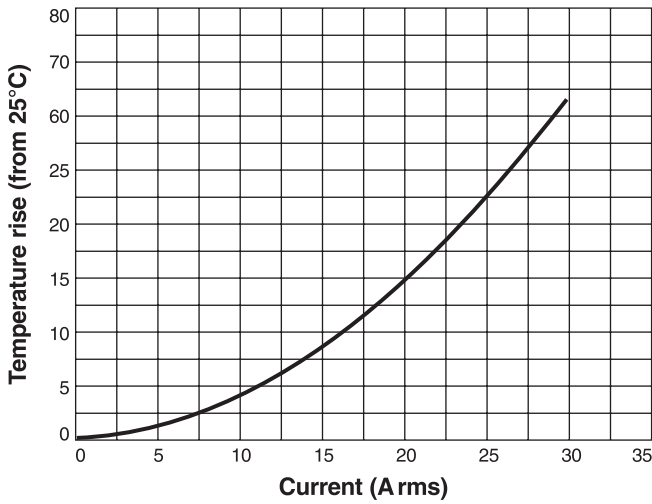
Typical Circuit



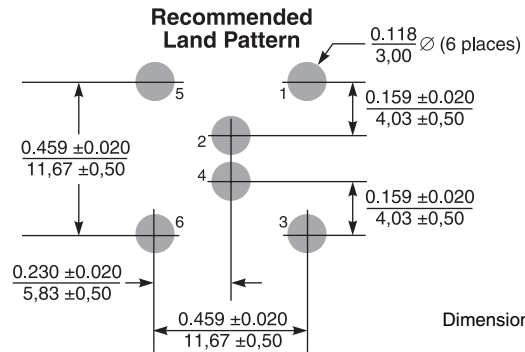
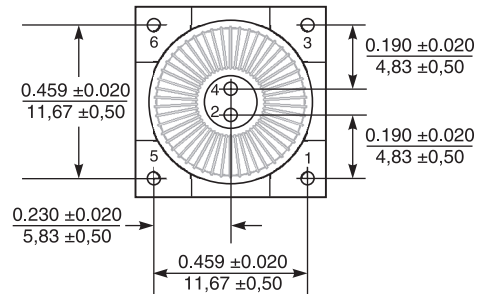
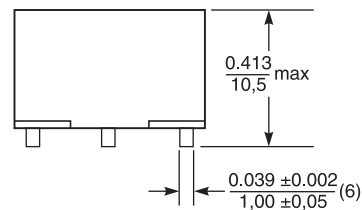
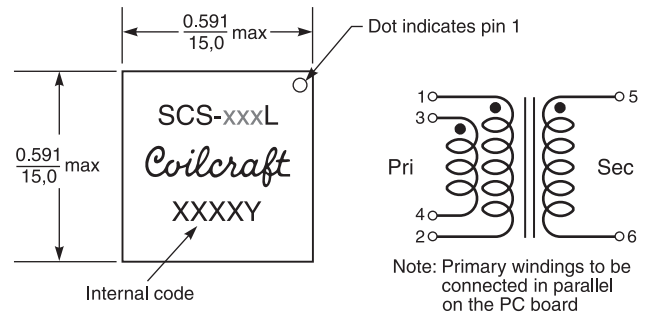


SCS Series Current Sense Transformers

Temperature Rise vs Current



Dimensions



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



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