



# NEW!

# Current Sense Transformers – 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 <sup>1</sup>	Turns (N) pri:sec	Inductance <sup>2</sup> min (mH)	DCR max <sup>6</sup> (Ohms)		Frequency range (kHz)	Volt-time product <sup>4</sup> (Vµsec)	Sensed current I <sub>in</sub> <sup>5</sup> max (A)	Terminating resistance R <sub>T</sub> <sup>6</sup> (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**

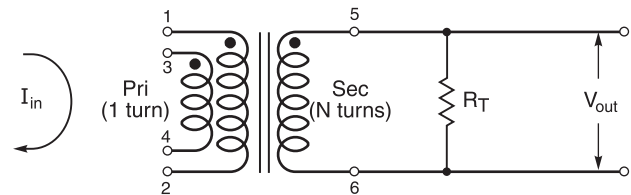
**Packaging:** D = 13" machine-ready reel. EIA-481 embossed plastic tape (200 parts per full reel).

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<sub>T</sub>) 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



**NEW!**



# SCS Series Current Sense Transformers

## Temperature Rise vs Current



## Dimensions

