NEW!

Current Sense Transformers CST4835

- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)
- Miniature SMT design, only 4.5 × 4.8 mm footprint
- 500 Vrms, one minute isolation (hipot) between windings
- Designed for use up to 1 MHz to sense continuous currents to 7 Amps

Core material Ferrite
Environmental RoHS compliant, halogen free
Terminations RoHS compliant silver over nickel over phos bronze. Other terminations available at additional cost.
Weight 115 – 122 mg
Ambient temperature –40°C to +85°C
Storage temperature Component: –40°C to +85°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 500/7″ reel; 2200/13″ reel; Plastic tape: 12 mm wide, 0.35 mm thick, 8 mm pocket spacing, 3.6 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 (Ohms) pri	DCR max (Ohms) sec	Frequency range (kHz)	Volt-time product[3] (Vμsec)	Sensed current I_{in}[4] max (A)	Terminating resistance R_T[5] (Ohms)
CST4835-020E_	1:20	33	0.003	0.35	83 – 1000	6.0	7	2.9
CST4835-030E_	1:30	74	0.003	0.90	56 – 1000	9.0	7	4.3
CST4835-040E_	1:40	132	0.003	1.60	42 – 1000	12.0	7	5.7
CST4835-050E_	1:50	205	0.003	2.50	33 – 1000	15.0	7	7.1
CST4835-060E_	1:60	295	0.003	3.60	28 – 1000	18.0	7	8.6
CST4835-070E_	1:70	400	0.003	4.60	24 – 1000	21.0	7	10.0
CST4835-100E_	1:100	820	0.003	9.50	17 – 1000	30.0	7	14.3
CST4835-125E_	1:125	1280	0.003	13.0	13 – 1000	37.5	7	17.9
CST4835-150E_	1:150	1800	0.003	21.0	11 – 1000	45.0	7	21.4

1. When ordering, please specify **termination** and **packaging** codes:

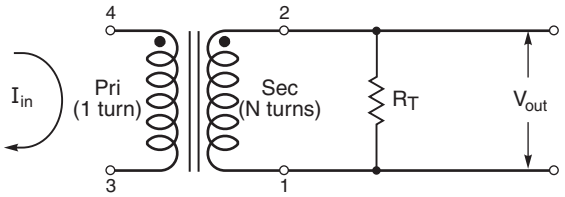
CST4835-150EC

Termination: E = RoHS compliant silver over nickel over phos bronze
Special order:
T = RoHS tin-silver-copper (95.5/4/0.5) or
S = non-RoHS tin-lead (63/37).

Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (500 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.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape (2200 parts per full reel).

2. Inductance measured between secondary pins at 100 kHz, 0.1 Vrms, 0 Adc.
3. Maximum volt-time product is for the secondary, based on 2000 Gauss.
4. Primary current of 7 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).
5. Terminating resistance (R_T) value is based on 1 Volt output with 7 Amps flowing through the primary. Varying terminating resistance increases or decreases output Voltage/Ampere according to the following equation: $R_T = V_{out} \times N_{sec}/I_{in}$.
6 Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.



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NEW!

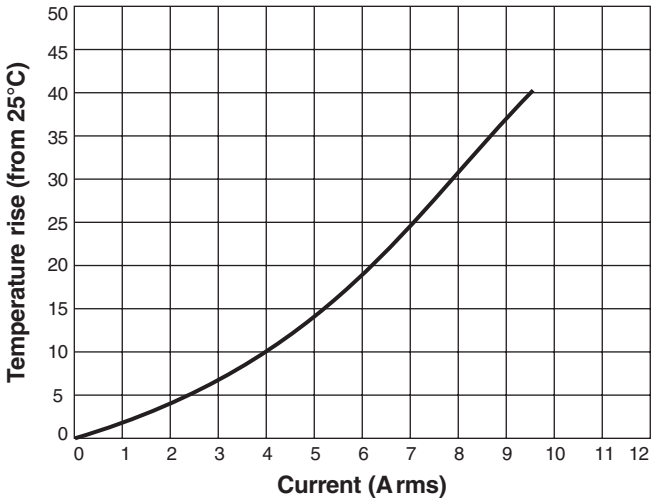
RoHS COMPLIANT

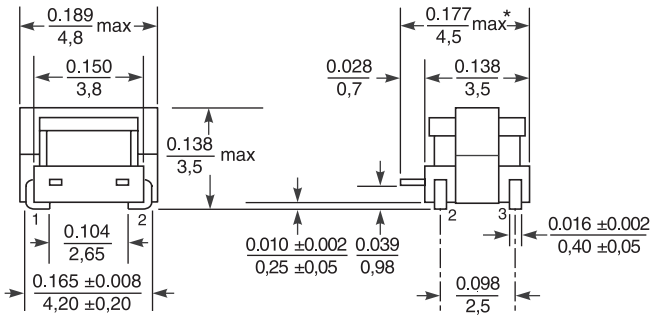
Halogen Free

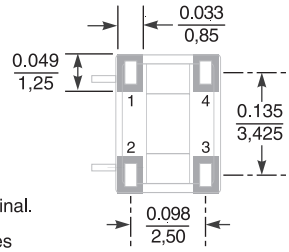
AEC Q200 +125°C

CST4835 Series SMT Current Sense Transformers

Temperature Rise vs Current







Recommended Land Pattern

* Includes solder applied to side terminal.

Unless otherwise specified, tolerances are ±0.004 in / 0,10 mm.

Dimensions are in inches / mm

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