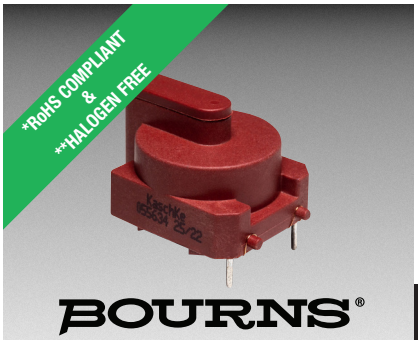


Features

- Integrated primary current path
- Turns ratio range: 1:50 to 1:2500
- Rated current up to 40 A
- Reinforced insulation
- RoHS compliant* and halogen free**

Applications

- Switched-mode power supplies
- Motor control
- Overload sensing
- AC current applications

Model 0556xx Series Current Sense Transformers

Electrical Specifications @ 25 °C

Bourns Part Number	Turns Ratio	Frequency Range	Current Rating	Inductance	Volt-time Product on Secondary Max.	DC Resistance
055650	50:1	10-300 kHz	0.1-40 A	6 mH	180 V-μs	0.140 Ω
055651	100:1	10-300 kHz		24 mH	360 V-μs	0.47 Ω
055652	200:1	10-300 kHz		96 mH	715 V-μs	1.8 Ω
055653	300:1	10-300 kHz		216 mH	1070 V-μs	3.4 Ω
055654	400:1	10-300 kHz		384 mH	1430 V-μs	5.7 Ω
055655	500:1	10-300 kHz		600 mH	1785 V-μs	9.4 Ω
055656	600:1	10-300 kHz		864 mH	2140 V-μs	13.5 Ω
055657	1000:1	10-300 kHz		2400 mH	3570 V-μs	35 Ω
055658	1000:1	50 Hz		30 H	6.4 V-ms	25 Ω
055659	1500:1	50 Hz		67.5 H	9.5 V-ms	52 Ω
055660	2000:1	50 Hz		120 H	12.7 V-ms	100 Ω
055661	2500:1	50 Hz		187.5 H	15.9 V-ms	135 Ω
055662	50:1	0.2-3 MHz		0.77 mH	180 V-μs	0.140 Ω
055663	100:1	0.2-3 MHz		3.1 mH	360 V-μs	0.47 Ω
055664	200:1	0.2-3 MHz		12.4 mH	715 V-μs	1.8 Ω

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

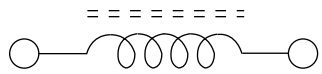
General Specifications

Operation Temperature
..... -30 °C to +125 °C
(Temperature Rise Included)
Storage Temperature
..... -40 °C to +85 °C
Temperature Rise .....40 °C at rated I_{rms}
Rated Current.....0.1 to 40 A

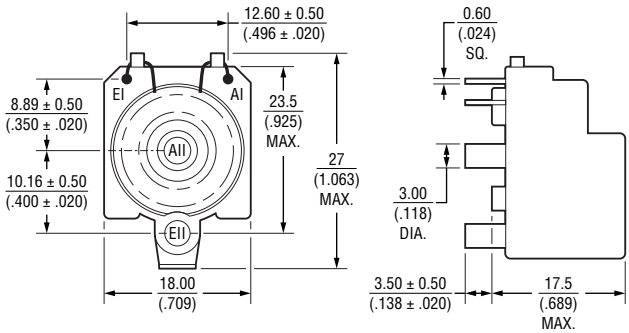
Materials

Core..... Ferrite, nanocrystalline
Wire .....Enameled copper
Terminal Finish ..... Sn
Packaging.....120 pcs. per tray

Schematic



Product Dimensions



DIMENSIONS: MM / (INCHES)

How To Order

Model — 0556xx

WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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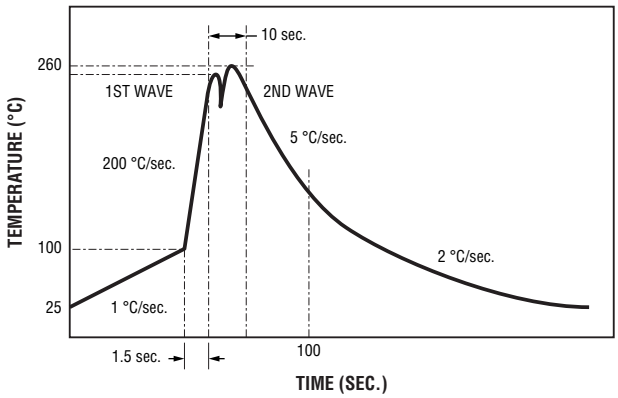
Solder Profile



Profile Feature	Pb-Free Assembly
Average ramp-up rate	~ 200 °C/second
Heating rate during preheat	typical 1-2 °/second max. 4 °/second
Final preheat temperature	within 125 °C of soldering temperature
Peak temperature T_p	260 °C
Time within +0 °C / -5 °C of actual peak temperature	10 seconds
Ramp-down rate	5 °C/second max.

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