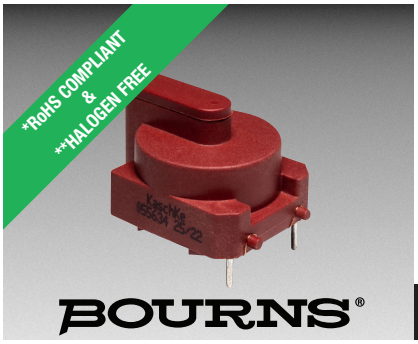



## Features

- 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

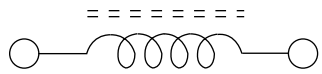
### General Specifications

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

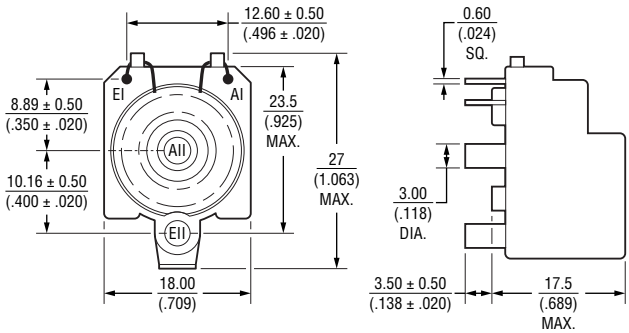
### Materials

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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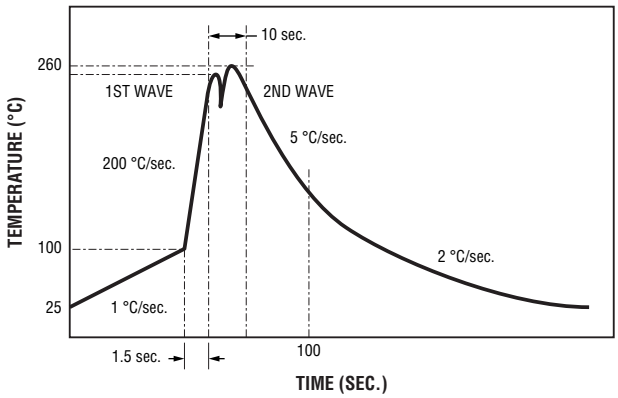
## Solder Profile




| Profile Feature | Pb-Free Assembly |
|---|---|
| Average ramp-up rate | ~ 200 °C/second |
| Heating rate during preheat | typical 1-2 °/second<br>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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