

## 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- $\mu$ s	0.140 $\Omega$
055651	100:1	10-300 kHz		24 mH	360 V- $\mu$ s	0.47 $\Omega$
055652	200:1	10-300 kHz		96 mH	715 V- $\mu$ s	1.8 $\Omega$
055653	300:1	10-300 kHz		216 mH	1070 V- $\mu$ s	3.4 $\Omega$
055654	400:1	10-300 kHz		384 mH	1430 V- $\mu$ s	5.7 $\Omega$
055655	500:1	10-300 kHz		600 mH	1785 V- $\mu$ s	9.4 $\Omega$
055656	600:1	10-300 kHz		864 mH	2140 V- $\mu$ s	13.5 $\Omega$
055657	1000:1	10-300 kHz		2400 mH	3570 V- $\mu$ s	35 $\Omega$
055658	1000:1	50 Hz		30 H	6.4 V-ms	25 $\Omega$
055659	1500:1	50 Hz		67.5 H	9.5 V-ms	52 $\Omega$
055660	2000:1	50 Hz		120 H	12.7 V-ms	100 $\Omega$
055661	2500:1	50 Hz		187.5 H	15.9 V-ms	135 $\Omega$
055662	50:1	0.2-3 MHz		0.77 mH	180 V- $\mu$ s	0.140 $\Omega$
055663	100:1	0.2-3 MHz		3.1 mH	360 V- $\mu$ s	0.47 $\Omega$
055664	200:1	0.2-3 MHz		12.4 mH	715 V- $\mu$ s	1.8 $\Omega$

### Additional Information

Click these links for more information:



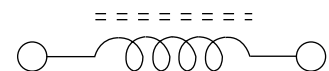
### General Specifications

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

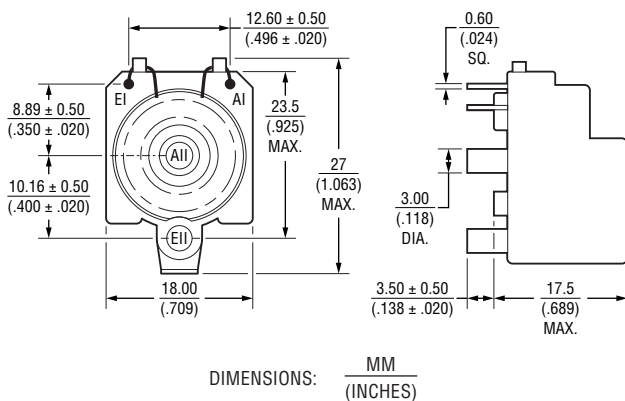
### Materials

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

### Schematic



### Product Dimensions



### How To Order

Model \_\_\_\_\_ **0556xx**



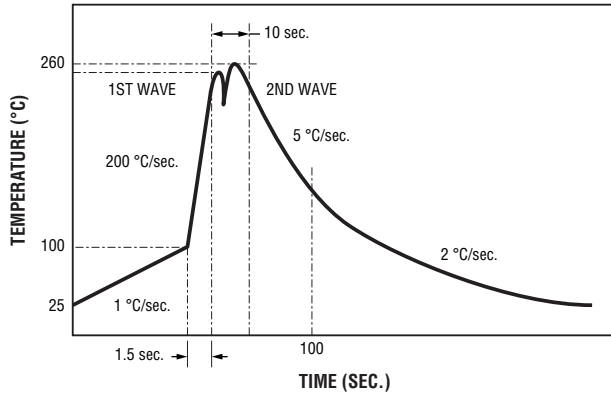
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* 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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