

## 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:



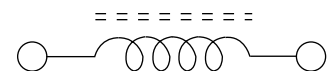
### General Specifications

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

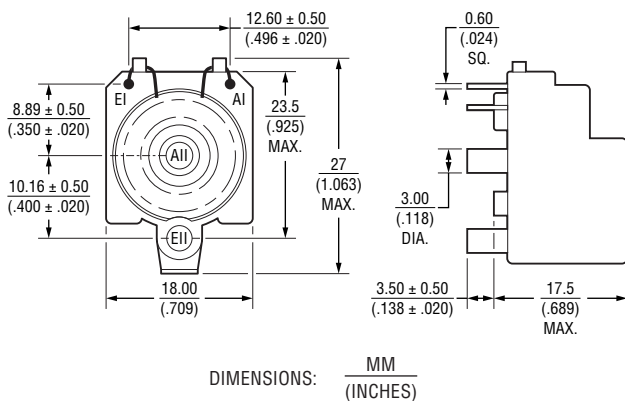
### Materials

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.

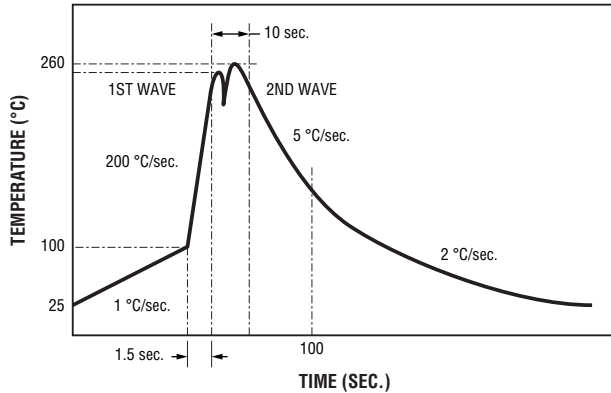
\*\* Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).

# Model 0556xx Series Current Sense Transformers

**BOURNS®**

## 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 <sub>p</sub>	260 °C
Time within +0 °C / -5 °C of actual peak temperature	10 seconds
Ramp-down rate	5 °C/second max.

**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 885 877 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

[www.bourns.com](http://www.bourns.com)

REV. 05/23

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf).