5400 Series

15A Current Sensing Transformers





FEATURES

- RoHS compliant
- Primary current rating 15A³
- 50, 100 and 200 turn variants
- Frequency range 50kHz to 500kHz
- Surface mount
- Compact package
- UL94 V-0 package materials
- J-STD-020C reflow

PRODUCT OVERVIEW

The 5400 series of current sense transformers are designed to monitor AC currents. The transformers can be used for high frequency current sensing in applications such as switched-mode power supplies, motor control, and electronic lighting ballasts.

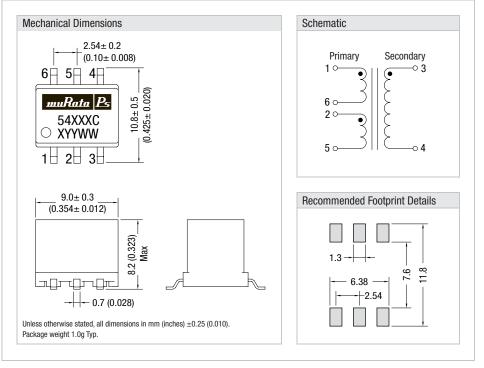
SELECTION GUIDE Min. Secondary Ma

| | | Min. Secondary | Max. DC Resistance | | Isolation | Terminating Desistance | |
|------------|----------------|------------------------------|--------------------|--------------------|-----------------------------------|---|--|
| Order Code | Turns Ratio | Inductance (0.1V @ 10kHz) | Primary (1-6, 2-5) | Secondary (3-4) | Voltage ¹ (Pri-Sec) | Terminating Resistance to produce 1Vout/1AIN | |
| | | mH | mΩ | Ω | kVrms | Ω | |
| 54050C | 1:1:50 | 3.8 | 7.0 | 0.5 | 1.2 | 50 | |
| 54100C | 1:1:100 | 14.8 | 7.0 | 3.2 | 1.2 | 100 | |
| 54200C | 1:1:200 | 60.0 | 7.0 | 6.6 | 1.2 | 200 | |

| ABSOLUTE MAXIMUM RATINGS | | | | |
|--------------------------------------|----------------|--|--|--|
| Operating free air temperature range | -40°C to 125°C | | | |
| Storage temperature range | -40°C to 150°C | | | |

| SOLDERING INFORMATION ² | | | | |
|------------------------------------|-------|--|--|--|
| Peak reflow solder temperature | 245°C | | | |
| Pin finish | Tin | | | |
| Moisture sensitivity level | 1 | | | |

PACKAGE SPECIFICATIONS



All specifications typical at T,=25°C

- 1. Flash tested for 1 second.
- 2. For further information, please visit www.murata-ps.com/rohs
- 3. Primary windings connected in parallel.



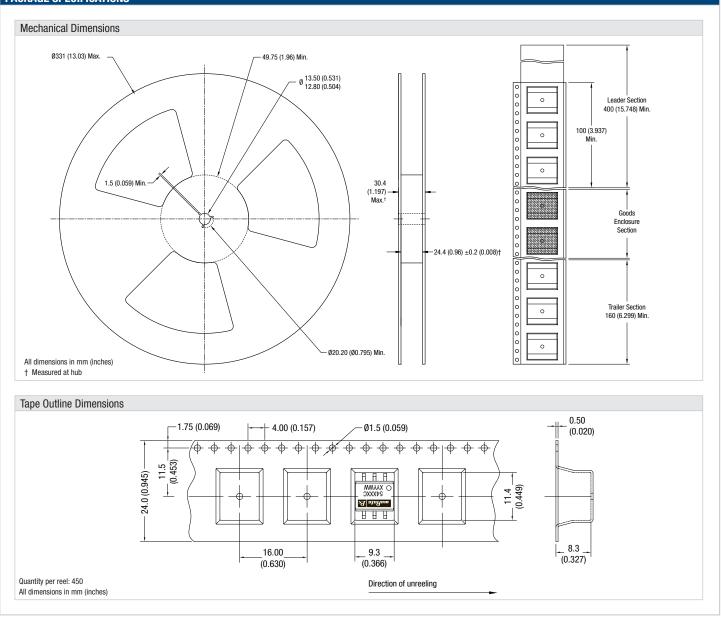
www.murata-ps.com/support



5400 Series

15A Current Sensing Transformers

PACKAGE SPECIFICATIONS



Murata Power Solutions, Inc. 11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A. ISO 9001 and 14001 REGISTERED

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.