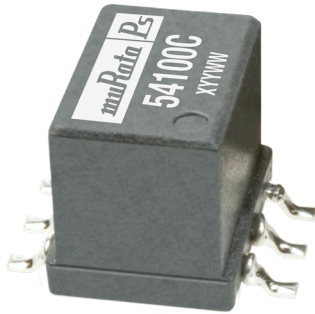




FEATURES

- 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

Order Code	Turns Ratio	Min. Secondary Inductance (0.1V @ 10kHz)	Max. DC Resistance		Isolation Voltage ¹ (Pri-Sec)	Terminating Resistance to produce 1V _{OUT} /1A _{IN}
		mH	Primary (1-6, 2-5) mΩ	Secondary (3-4) 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

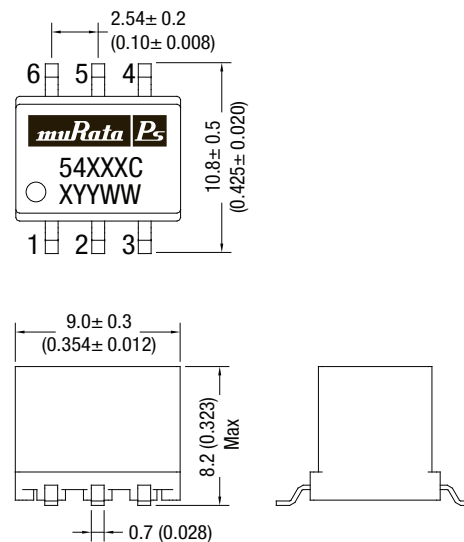
Operating free air temperature range	-40°C to 125°C
Storage temperature range	-40°C to 150°C

SOLDERING INFORMATION²

Peak reflow solder temperature	245°C
Pin finish	Tin
Moisture sensitivity level	1

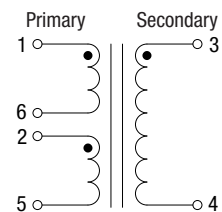
PACKAGE SPECIFICATIONS

Mechanical Dimensions

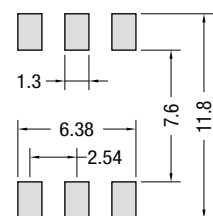


Unless otherwise stated, all dimensions in mm (inches) ± 0.25 (0.010).
Package weight 1.0g Typ.

Schematic



Recommended Footprint Details



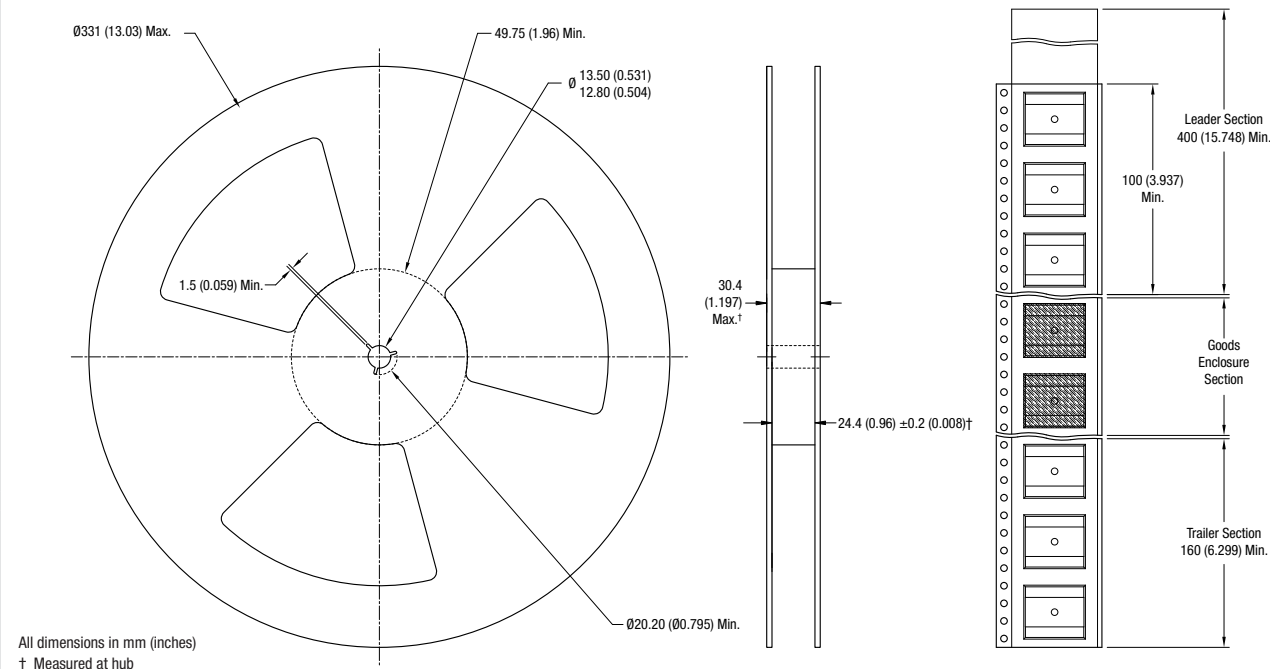
All specifications typical at $T_A = 25^\circ\text{C}$

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

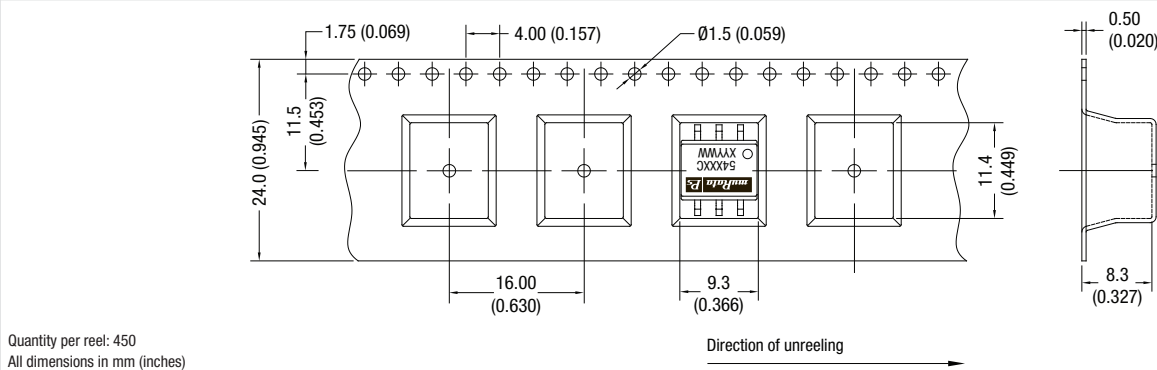


PACKAGE SPECIFICATIONS

Mechanical Dimensions



Tape Outline Dimensions



Murata Power Solutions, Inc.

11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A.

Tel: (508) 339-3000 (800) 233-2765 Fax: (508) 339-6356

www.murata-ps.com email: sales@murata-ps.com ISO 9001 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.
© 2008 Murata Power Solutions, Inc.

USA: Mansfield (MA), Tel: (800) 233 2765, email: sales@murata-ps.com

Canada: Toronto, Tel: (866) 740 1232, email: toronto@murata-ps.com

UK: Milton Keynes, Tel: +44 (0)1908 615232, email: mk@murata-ps.com

France: Montigny Le Bretonneux, Tel: +33 (0)1 34 60 01 01, email: france@murata-ps.com

Germany: München, Tel: +49 (0)89-544334-0, email: ped.munich@murata-ps.com

Japan: Tokyo, Tel: 3-3779-1031, email: sales_tokyo@murata-ps.com

Osaka, Tel: 6-6354-2025, email: sales_osaka@murata-ps.com

Website: www.murata-ps.jp

China: Shanghai, Tel: +86 215 027 3678, email: shanghai@murata-ps.com

Guangzhou, Tel: +86 208 221 8066, email: guangzhou@murata-ps.com