5400 Series

15A Current Sensing Transformers



FEATURES

- RoHS compliant
- Primary current rating 15A[3]
- 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 1VOUT/1AIN
			Primary (1-6, 2-5)	Secondary (3-4)		
		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

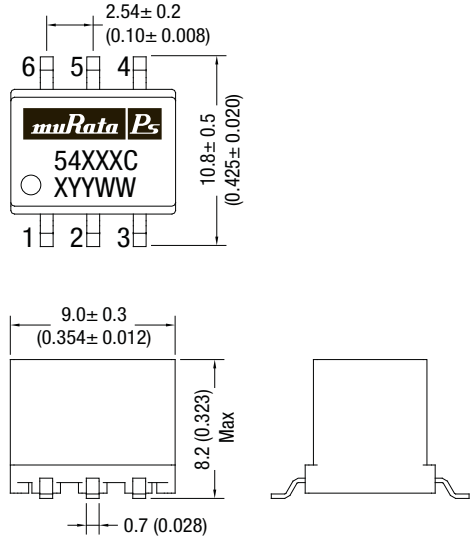
Operating free air temperature range	-40°C to 125°C
Storage temperature range	-40°C to 150°C

SOLDERING INFORMATION[2]

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

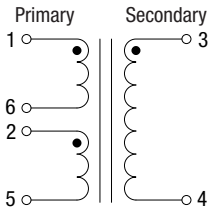
PACKAGE SPECIFICATIONS

Mechanical Dimensions

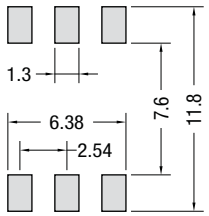


Unless otherwise stated, all dimensions in mm (inches) ±0.25 (0.010).
Package weight 1.0g Typ.

Schematic



Recommended Footprint Details



All specifications typical at T_A=25°C

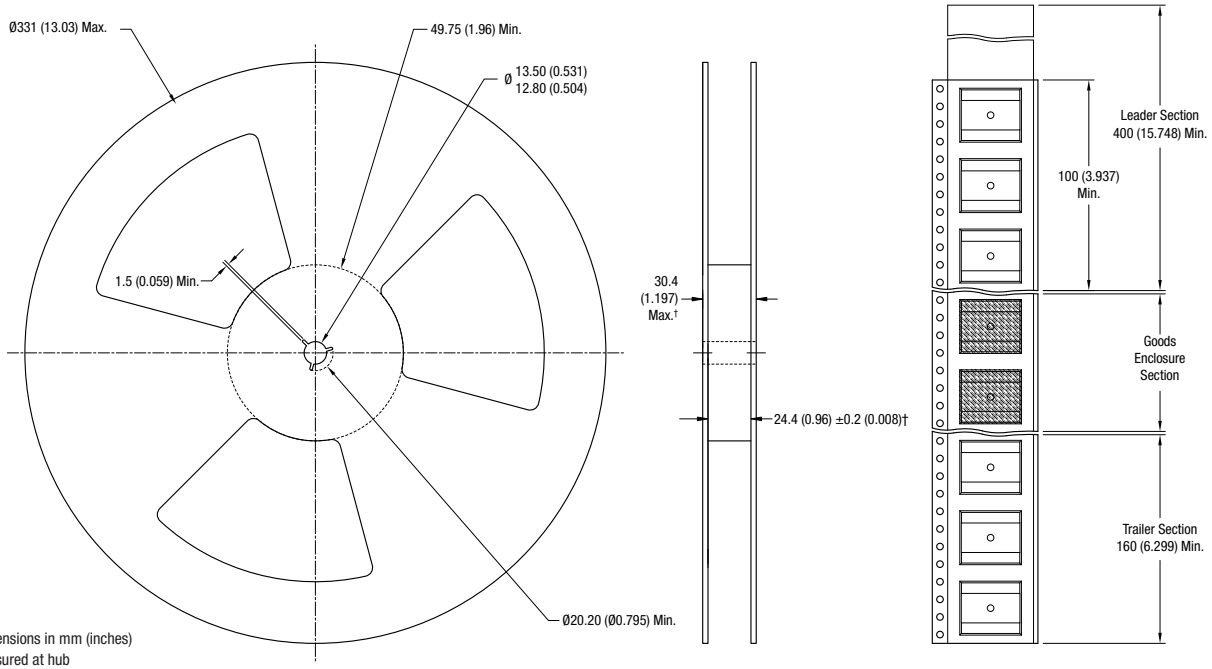
1. Flash tested for 1 second.
2. For further information, please visit www.murata-ps.com/rohs
3. Primary windings connected in parallel.

RoHS COMPLIANT 2002/95/EC

For full details go to www.murata-ps.com/rohs

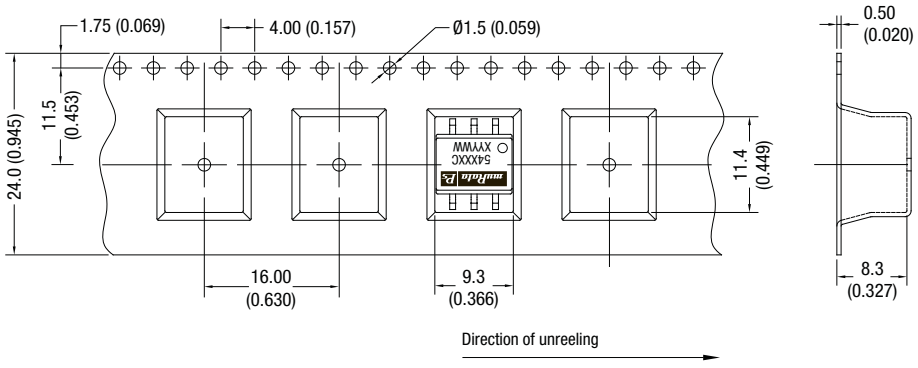
PACKAGE SPECIFICATIONS

Mechanical Dimensions



All dimensions in mm (inches)
† Measured at hub

Tape Outline Dimensions



Quantity per reel: 450
All dimensions in mm (inches)

Murata Power Solutions

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