

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}
			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

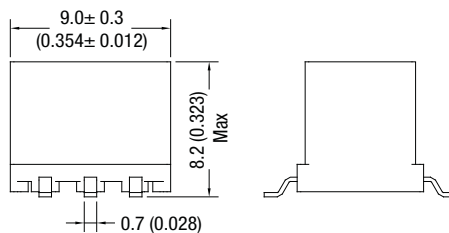
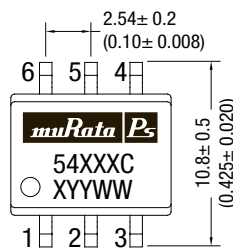
Operating free air temperature range	-40°C to 125°C
Storage temperature range	-40°C to 150°C

SOLDERING INFORMATION²

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

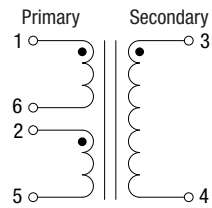
PACKAGE SPECIFICATIONS

Mechanical Dimensions

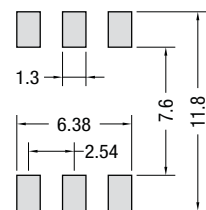


Unless otherwise stated, all dimensions in mm (inches) ±0.25 (0.010).
Package weight 1.0g Typ.

Schematic



Recommended Footprint Details



All specifications typical at T_A=25°C

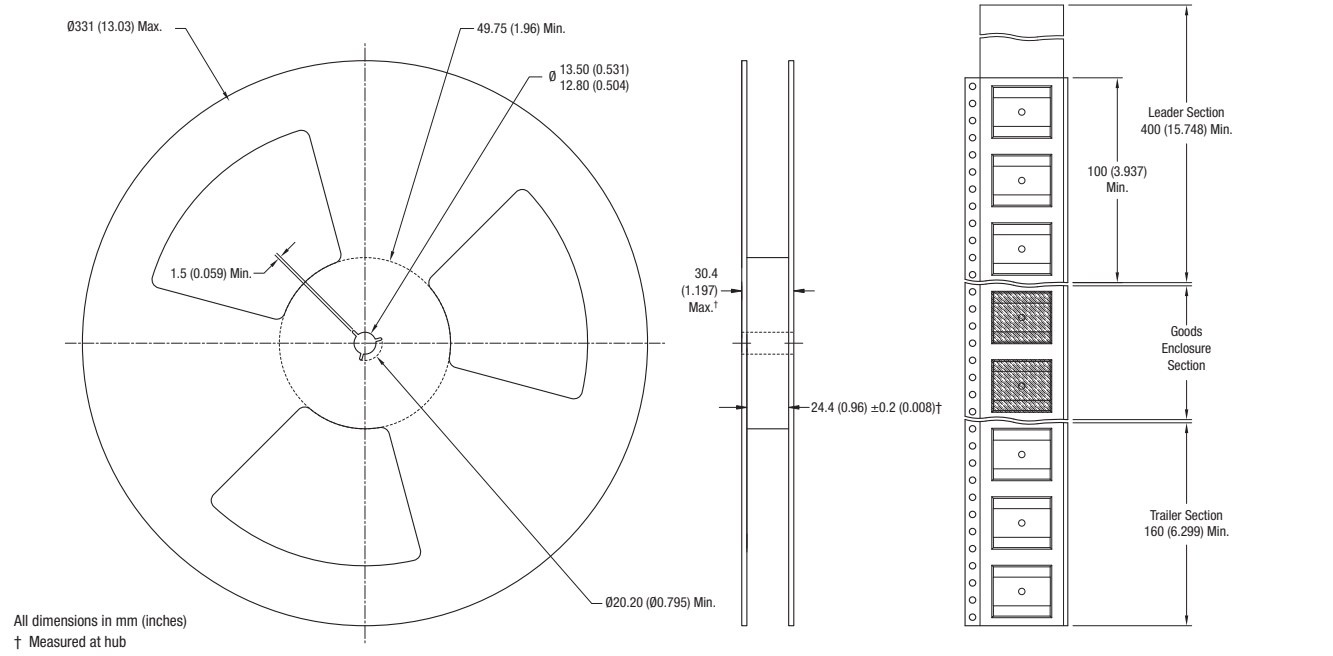
1. Flash tested for 1 second.
2. For further information, please visit www.murata-ps.com/rohs
3. Primary windings connected in parallel.



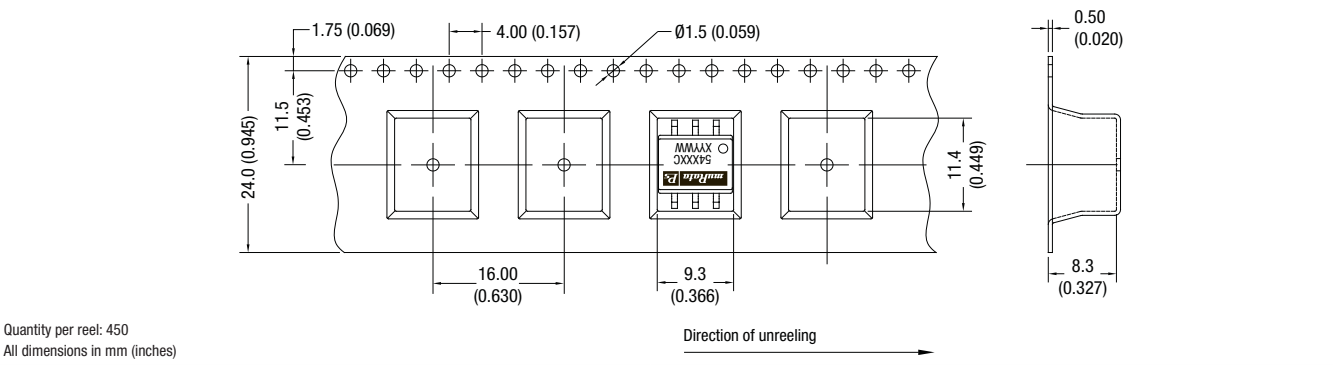
For full details go to
www.murata-ps.com/rohs

PACKAGE SPECIFICATIONS

Mechanical Dimensions



Tape Outline Dimensions



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- Power plant control equipment
- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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