5400 Series

15A Current Sensing Transformers

muRata Power Solutions



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.

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SELECTION GUIDE								
Order Code	Turns Ratio	Min. Secondary Inductance (0.1V @ 10kHz)	Max. DC Resistance		Isolation	Terminating Desistance		
			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 $T_a=25^{\circ}C$

1. Flash tested for 1 second.

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



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- Aerospace equipment
- Undersea equipment
- 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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