



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## FEATURES

- RoHS compliant
- 0.47mH to 4.7mH
- Surface mount
- Up to 0.7A I<sub>DC</sub>
- UL94 V-0 package materials
- Compact size
- J-STD-020C reflow
- Backward compatible with Sn/Pb soldering systems

## PRODUCT OVERVIEW

The 5000 series is a range of surface-mount common mode chokes designed to attenuate up to 100MHz common mode noise where line filtering is required, such as low current switching power supplies and telecom applications.

## SELECTION GUIDE

Order Code	Inductance, L <sup>1</sup> (0.1V @ 100kHz)		Leakage Inductance, L <sub>L</sub> (0.1V @ 100kHz)		DC Resistance, R <sup>1</sup>	Current Rating <sup>3</sup> (series connection)	Isolation <sup>4</sup>
	Nom.	Tolerance	Typ.	Max.	Max.	mA <sub>DC</sub>	V <sub>rms</sub>
	mH	%	μH	μH	Ω		
50474C	0.47	+50%/-30%	0.2	0.40	0.30	700	500
50105C	1.00		0.2	0.40	0.30	700	
50225C	2.20		0.25	0.60	0.40	500	
50475C	4.70		0.4	0.80	0.70	400	

## ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 125°C

## SOLDERING INFORMATION<sup>2</sup>

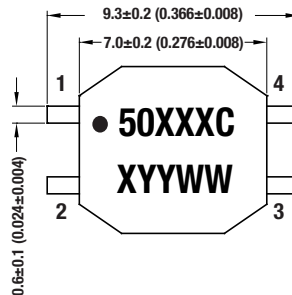
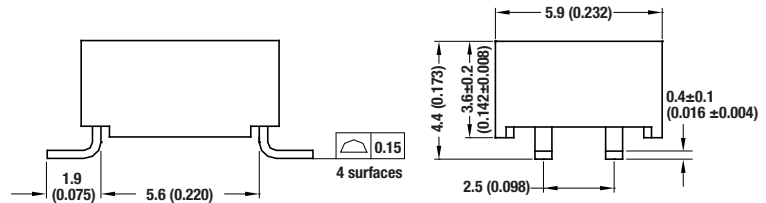
Peak reflow temperature	250°C
Pin finish	Pure tin dip

All specifications typical at T<sub>A</sub>=25°C

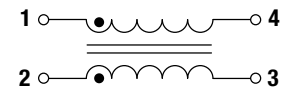
- 1 Measured between pins 1-4 or 2-3.
- 2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)
- 3 The maximum DC current occurs when its temperature rise reaches 40°C.
- 4 Flash tested for 1 second.

## PACKAGE SPECIFICATIONS

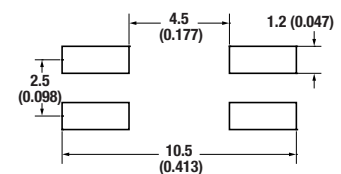
### Mechanical Dimensions



### Schematic



### Recommended Footprint Details

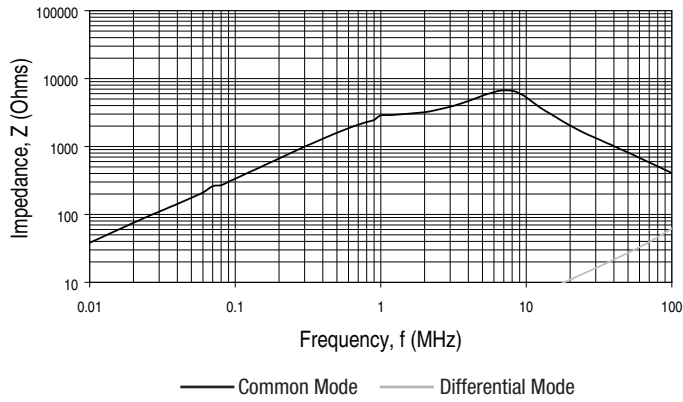


Unless otherwise stated, all dimensions in mm (inches) ±0.25 (0.010).  
Package weight 0.30g Typ.

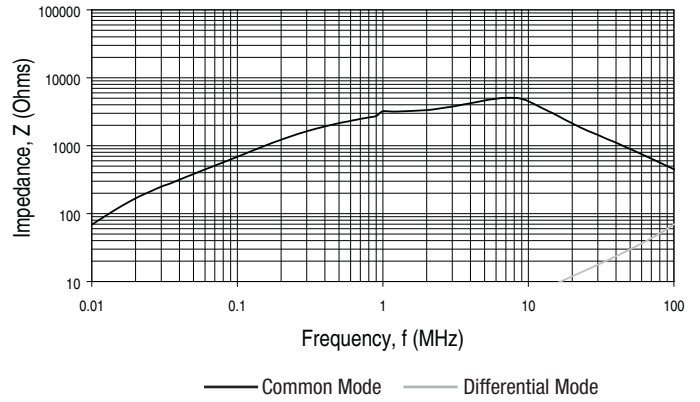


**IMPEDANCE IN COMMON MODE AND DIFFERENTIAL MODE VS FREQUENCY**

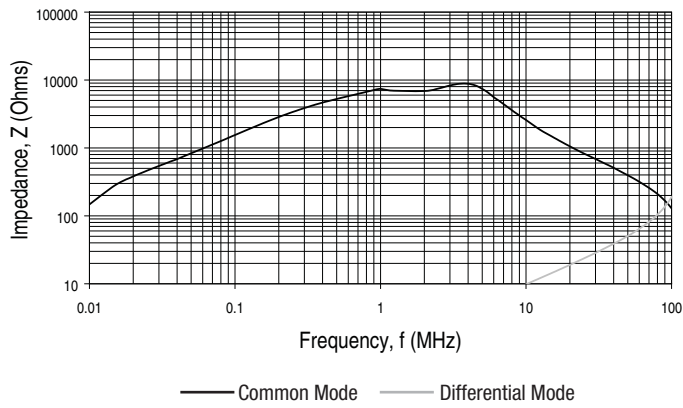
**50474C**



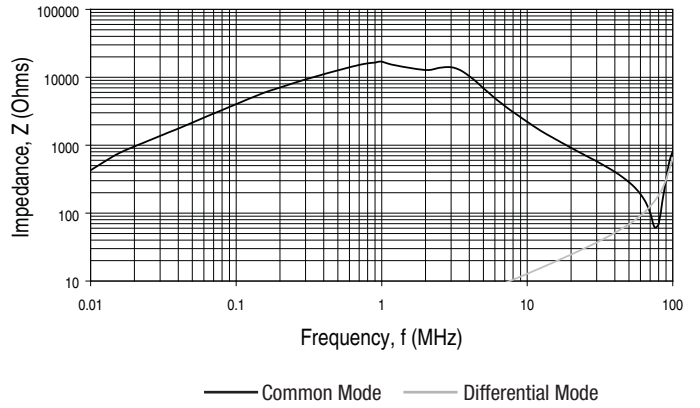
**50105C**



**50225C**



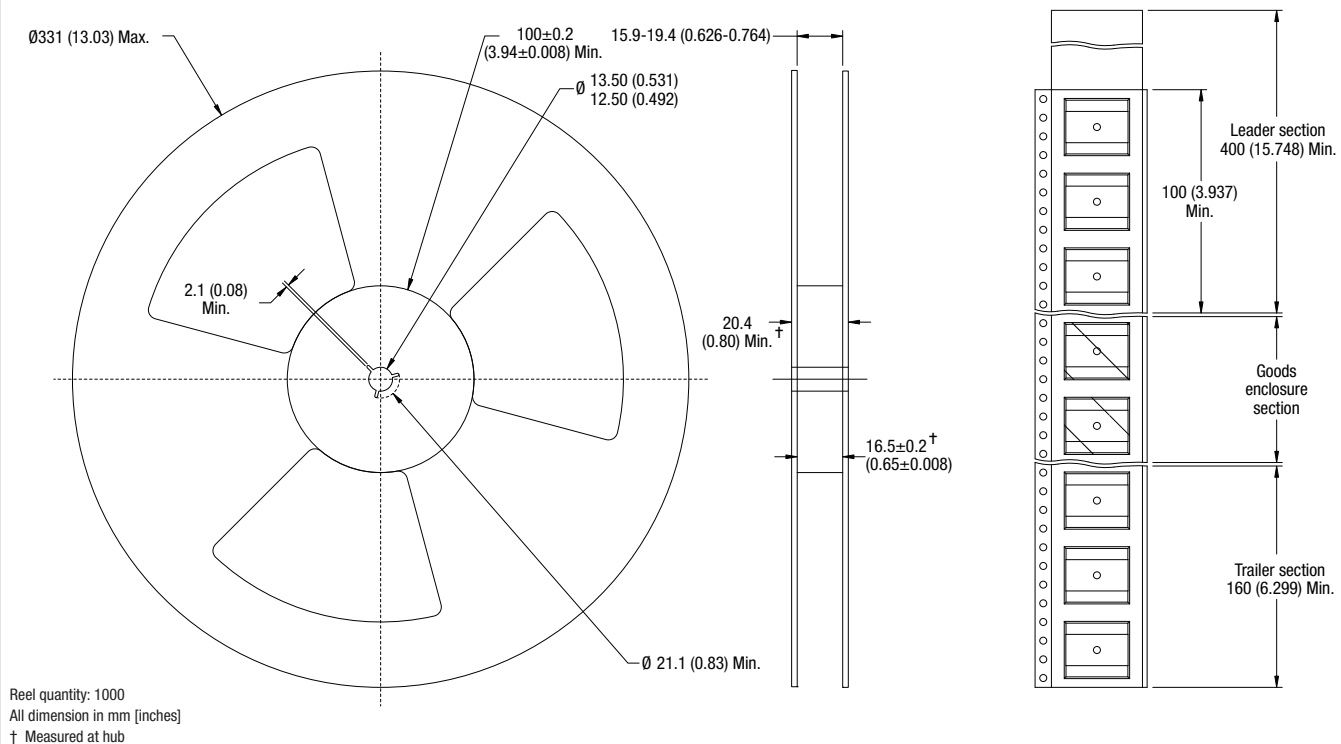
**50475C**



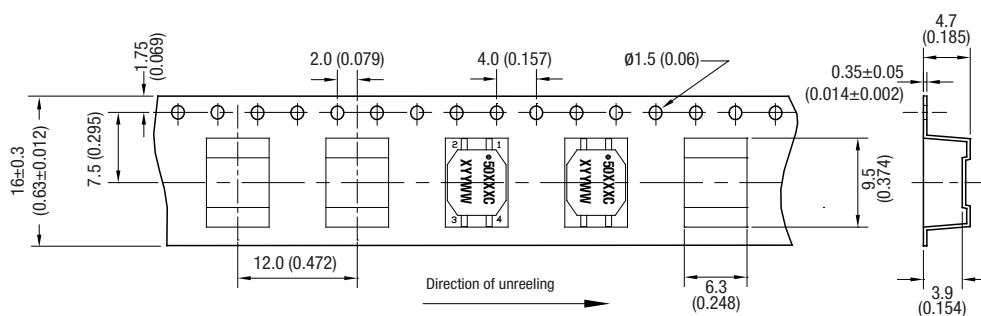


**PACKAGE SPECIFICATIONS**

**Mechanical Dimensions**



**Tape Outline Dimensions**



Unless otherwise stated, all dimensions in mm (inches)  $\pm$  0.1 (0.004).

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

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