



## 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
	Nom.	Tolerance	Typ.	Max.	Max.		
	mH	%	μH	μH	Ω	mA <sub>DC</sub>	V <sub>rms</sub>
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

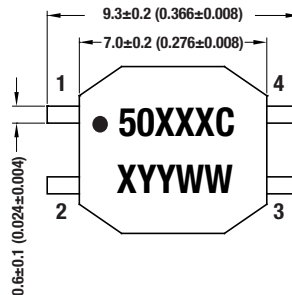
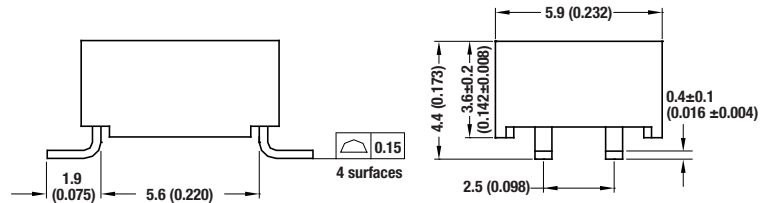
1 Measured between pins 1-4 or 2-3

2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

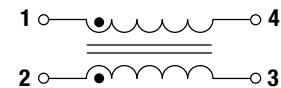
3 The maximum DC current occurs when its temperature rise reaches 40°C.

## PACKAGE SPECIFICATIONS

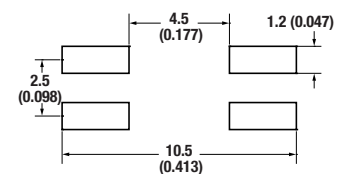
### Mechanical Dimensions



### Schematic



### Recommended Footprint Details

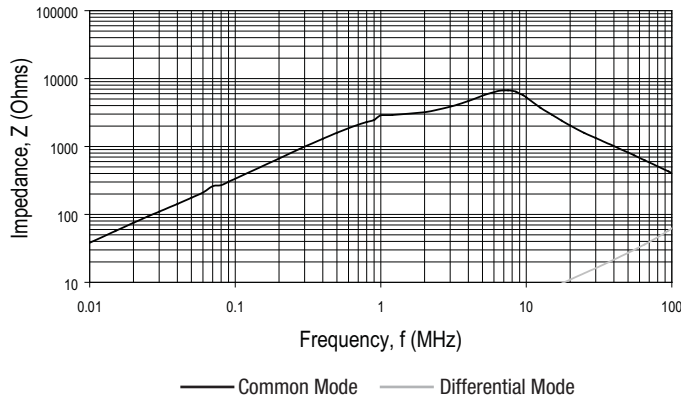


Unless otherwise stated, all dimensions in mm (inches) ±0.25 (0.010).  
Package weight 0.30g Typ.

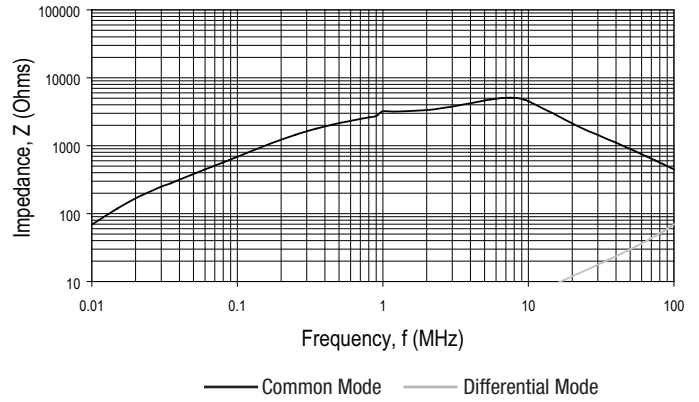


**IMPEDANCE IN COMMON MODE AND DIFFERENTIAL MODE VS FREQUENCY**

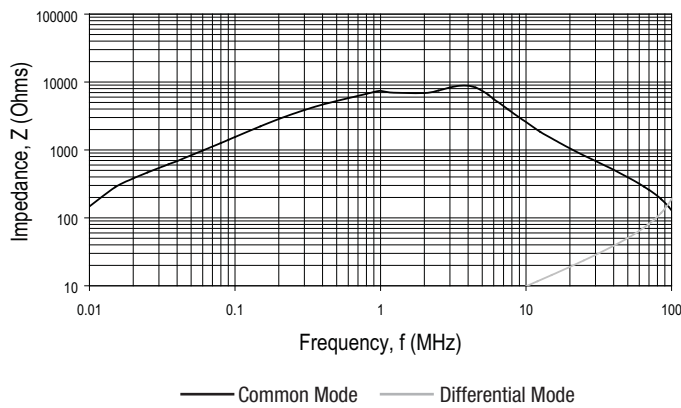
**50474C**



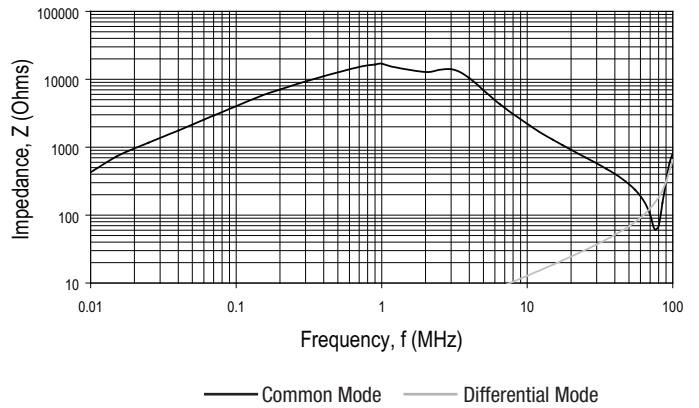
**50105C**



**50225C**

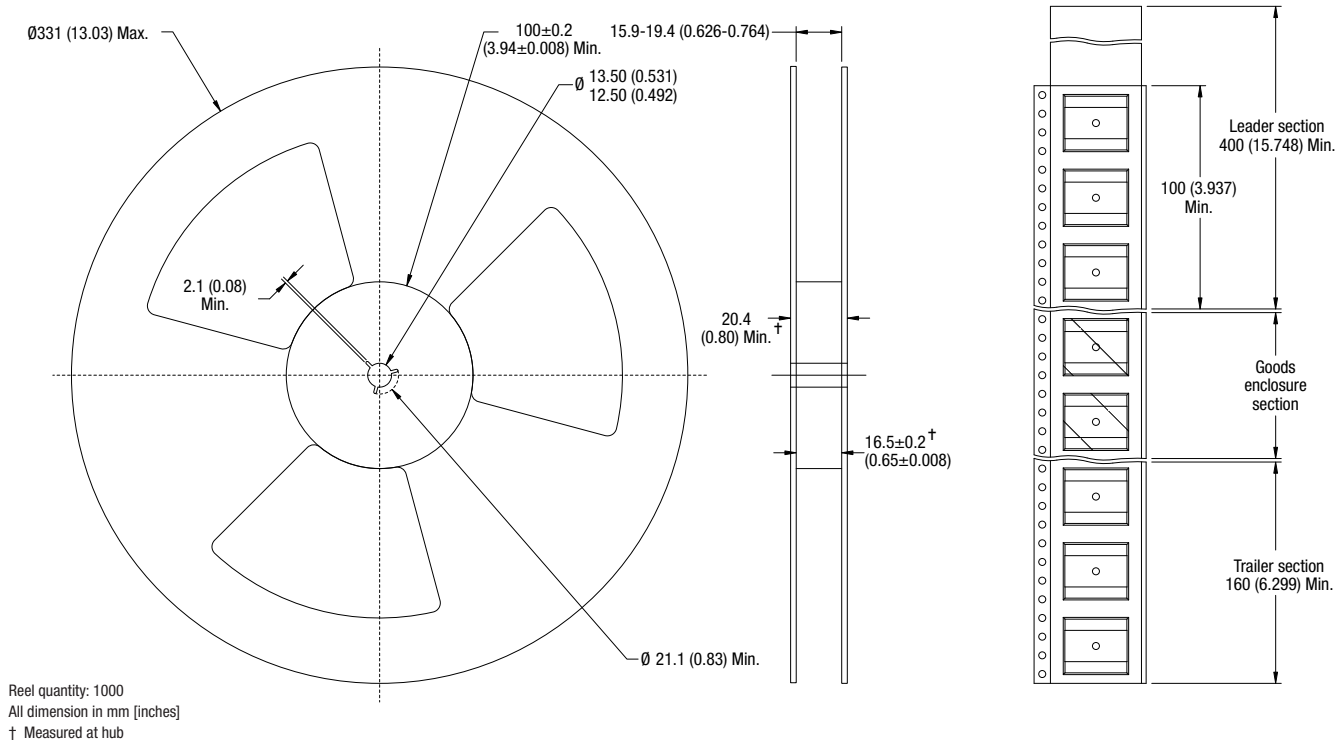


**50475C**

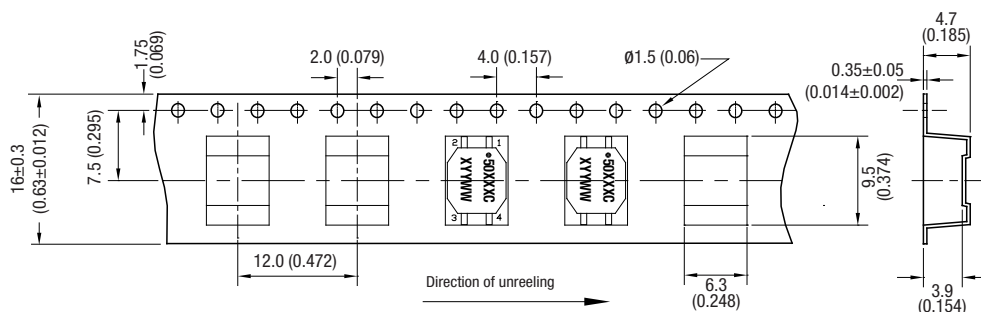


**PACKAGE SPECIFICATIONS**

**Mechanical Dimensions**



**Tape Outline Dimensions**



Unless otherwise stated, all dimensions in mm (inches) ± 0.1 (0.004).

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**

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- 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