

## FEATURES

- RoHS compliant
- Toroidal construction
- Up to 4.5A I<sub>DC</sub>
- Inductance range from 10µH to 1.0mH
- Low EMI
- UL 94V-0 packaging materials
- Low DC resistance

## PRODUCT OVERVIEW

The 3200 series is a range of through-hole power inductors. Due to the toroidal construction, they exhibit a very low EMI as stray flux is kept to a minimum. Typical applications include switching regulators, and power line filtering.

## SELECTION GUIDE

Order Code	Inductance, L		DC Current <sup>2</sup>		DC Resistance		Q @ f MHz		SRF	Package Weight
	±15%		Max.	Max.	Nom.		Typ.	Typ.		
	µH	A	mΩ	Q	f	MHz	g			
32100C	10	4.50	20	3.1	1.0	69	7.8			
32150C	15	3.70	24	3.1	1.0	53	8.1			
32220C	22	3.00	29	3.2	1.0	41	8.4			
32330C	33	2.50	36	3.2	1.0	28	8.8			
32470C	47	2.10	42	3.1	1.0	21	9.2			
32680C	68	1.70	62	3.1	1.0	11	9.0			
32101C	100	1.40	77	3.5	0.8	5.3	9.6			
32151C	150	1.20	117	3.3	0.8	3.3	9.4			
32221C	220	0.96	141	3.3	0.8	2.8	9.8			
32331C	330	0.78	215	3.2	0.8	2.3	9.9			
32471C	470	0.66	312	2.8	0.8	1.6	9.6			
32681C	680	0.55	377	2.0	0.8	1.2	10.4			
32102C	1000	0.45	568	1.2	0.8	1.0	10.1			

## ABSOLUTE MAXIMUM RATINGS

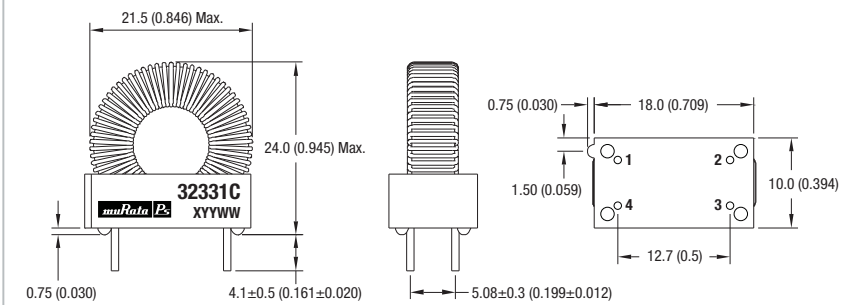
Operating temperature range	-40°C to 125°C
Storage temperature range	-40°C to 125°C

## SOLDERING INFORMATION<sup>1</sup>

Peak wave solder temperature	260°C
Pin finish	Tin

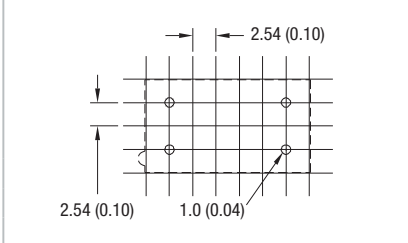
## PACKAGE SPECIFICATIONS

### Mechanical Dimensions



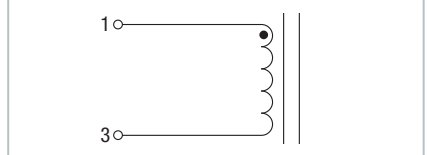
Package weight: See selection guide.

### Recommended Footprint Details



Unless otherwise stated, all dimensions in mm (inches) ± 0.25 (0.010).

### Pin Connections



### Packaging

Supplied in trays (60 pieces per tray)



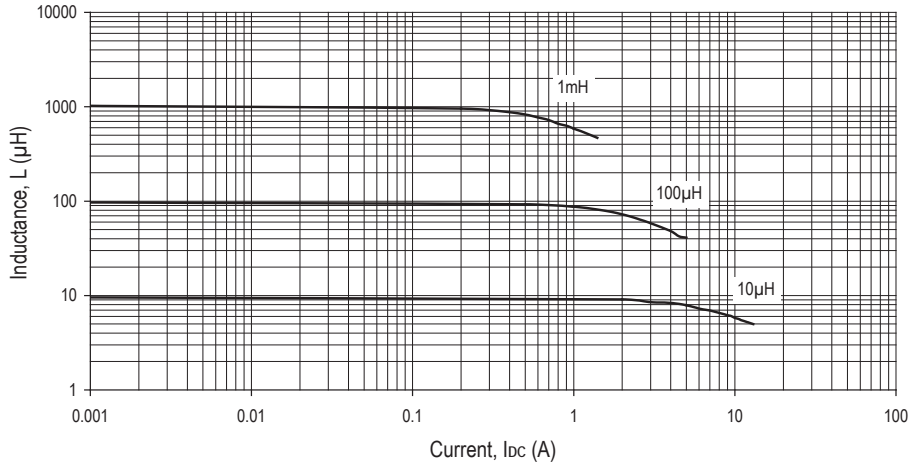
For full details go to [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

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

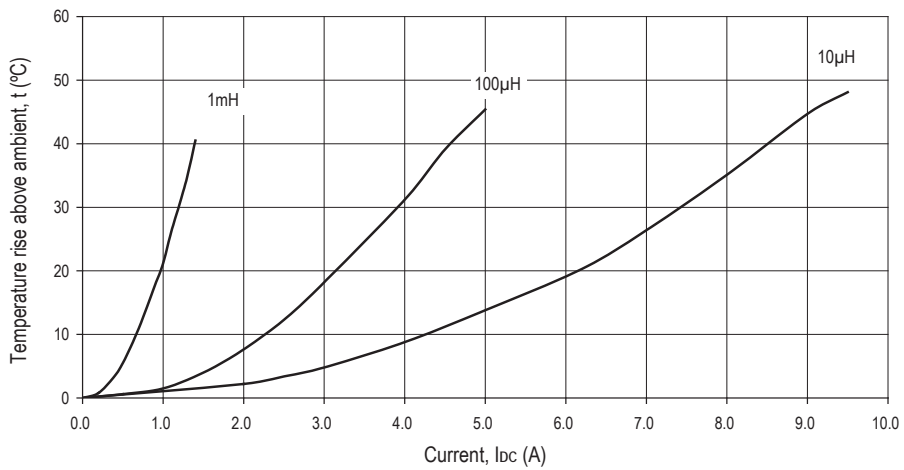
1 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

2 The maximum DC current is the value at which the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

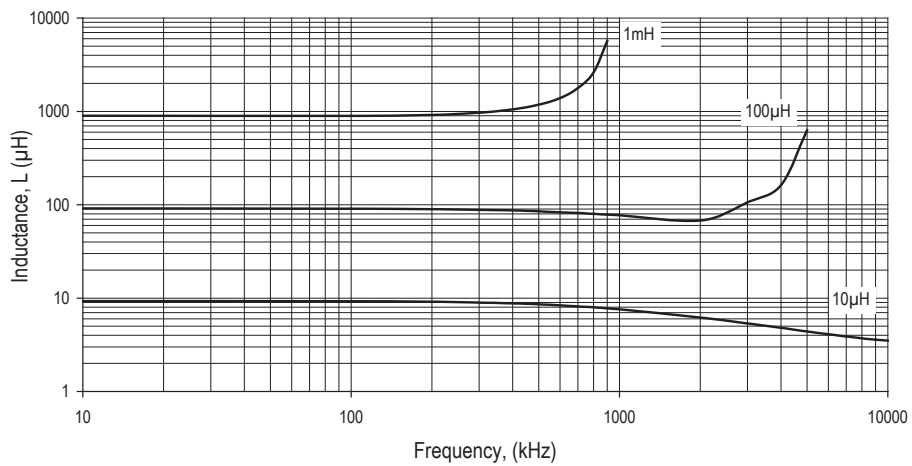
**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**



**INDUCTANCE Vs FREQUENCY**



**DISCLAIMER**

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

Particularly for safety-critical and/or life-critical applications, i.e. applications that may directly endanger or cause the loss of life, inflict bodily harm and/or loss or severe damage to equipment/property, and severely harm the environment, a prior explicit written approval from Murata is strictly required. Any use of Murata standard products for any safety-critical, life-critical or any related applications without any prior explicit written approval from Murata shall be deemed unauthorised use.

These applications include but are not limited to:

- Aircraft equipment
- 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

Murata makes no express or implied warranty, representation, or guarantee of suitability, fitness for any particular use/purpose and/or compatibility with any application or device of the buyer, nor does Murata assume any liability whatsoever arising out of unauthorised use of any Murata product for the application of the buyer. The suitability, fitness for any particular use/purpose and/or compatibility of Murata product with any application or device of the buyer remain to be the responsibility and liability of the buyer.

Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm, and take appropriate remedial actions. Buyer will fully indemnify and hold Murata, its affiliated companies, and its representatives harmless against any damages arising out of unauthorised use of any Murata products in any safety-critical and/or life-critical applications.

Remark: Murata in this section refers to Murata Manufacturing Company and its affiliated companies worldwide including, but not limited to, Murata Power Solutions.



This product is subject to the following **operating requirements** and the **Life and Safety Critical Application Sales Policy**:

Refer to: <https://www.murata.com/en-eu/products/power/requirements>

Murata Power Solutions (Milton Keynes) Ltd. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

© 2021 Murata Power Solutions (Milton Keynes) Ltd.