# imall

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

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# 4600 Series







### **FEATURES**

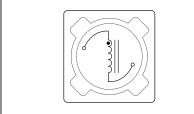
RoHS compliant
■ 0.28µH to 1.0mH
Up to 8.7A loc
Bobbin format
Surface mount
Integral EMI shield
Compact size
Tape and reel packaging
UL 94V-0 materials
J-STD-020-C reflow

### DESCRIPTION

The 4600 series is a range of bobbin-wound, shielded inductors suitable for power-line filtering found in consumer electronics such as desktop computers, LED applications and GPS systems, as well as in a vast range of industrial and telecom applications including network hubs, bridges & routers, and high frequency wireless communication devices.

These surface mount inductors are extremely compact and have an integral shield, making them useful in EMI sensitive applications.

### PIN CONNECTIONS (TOP VIEW)

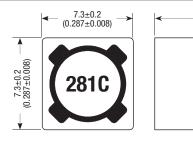




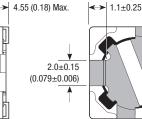
CTION GUIDE			
Order Code	Inductance (10kHz, 0.1VAc) ±20%	DC Current <sup>1</sup>	DC Resistance
	Nom.	Max.	Max.
	μH	А	mΩ
46281C	0.28 (±30%)	8.7	8
46541C	0.54 (±30%)	7.7	10
46102C	1.0 (±30%)	6.8	13
46152C	1.5 (±30%)	6.3	15
46222C	2.2 (±30%)	5.0	21
46332C	3.3 (±30%)	4.3	29
46472C	4.7 (±30%)	3.7	37
46682C	6.8 (±30%)	3.1	52
46103C	10	2.4	66
46153C	15	2.2	94
46223C	22	1.8	120
46333C	33	1.45	190
46473C	47	1.25	260
46683C	68	1.05	360
46104C	100	0.86	500
46154C	150	0.72	720
46224C	220	0.57	1050
46334C	330	0.46	1850
46474C	470	0.39	2800
46684C	680	0.32	3900

### MECHANICAL DIMENSIONS

46105C



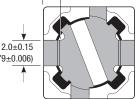
1000



0.27

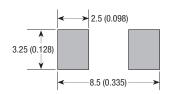
1.1±0.25 (0.043±0.01) < >

4900



#### **Recommended Footprint Details\***

Tin



\*Distance between the outside ends of the terminations is 7.1±0.1 (0.28±0.004) Unless otherwise stated, all dimensions in mm (inches)  $\pm$  0.25 (0.010). Package weight: 0.8g Typ.

ABSOLUTE MAXIMUM RATINGS				
Operating temperature range	-40°C to 125°C			
Storage temperature range	-40°C to 150°C			
SOLDERING INFORMATION <sup>2</sup>				
Peak reflow solder temperature	250°C			

## Pin finish

Specifications typical at  $T_A = 25^{\circ}C$ 

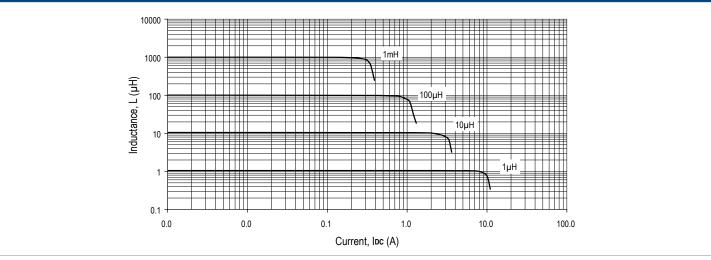
- 1 Maximum DC current occurs when either the inductance falls to 75% of its
- nominal value or when its temperature rise reaches 40°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs

# muRata Ps Murata Power Solutions

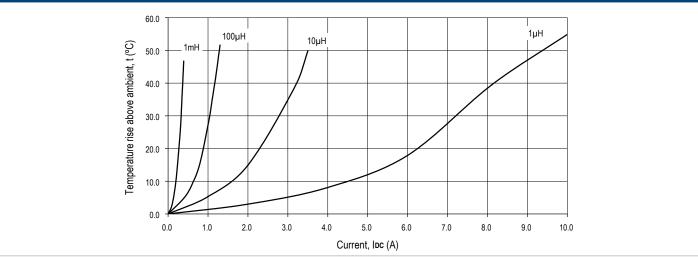
# 4600 Series

Shielded Surface Mount Power Inductors

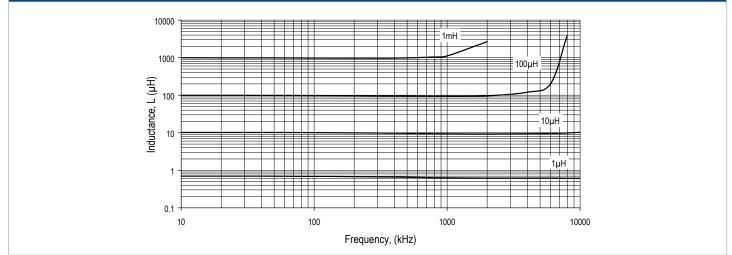








### **INDUCTANCE Vs FREQUENCY**





# 4600 Series

Shielded Surface Mount Power Inductors

#### **TAPE & REEL SPECIFICATIONS** REEL OUTLINE DIMENSIONS Ø331 (13.031) Max. 49.75 (1.96) Min. 15.9-19.4\* (0.626-0.764) Ø 13.50 0.531 0.492 Leader Section 400 (15.748) Min. 0 0 0 100 (3.937) Min. 0 0 0 0 0 0 0 1.50 (0.059) Min 22.4 (0.882) Max.<sup>†</sup> 0 Goods Enclosure Section 16.3-16.7 (0.642-0.657)† 0 0 0 Trailer Section 160 (6.299) Min. 0 0 0 0 All dimensions in mm (inches) 0 \* Includes flange distortion at outer edge 021.1 (00.83) Min. † Measured at hub TAPE OUTLINE DIMENSIONS -1.75 (0.069) 12.0 (0.472) -4.0 (0.157) --2.0 (0.079) Ø1.5 (0.06) - 0.4 (0.016) ¢ $\oplus$ $\oplus$ Φ $\oplus$ Φ Φ Φ Φ Φ Φ Φ Φ $\oplus$ 7.5 (0.295) 16.0 7.6 (0.30) 4.7 (0.185) DIRECTION OF UNREELING All dimensions in mm (inches) Reel quantity: 1000

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

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