Murata Power Solutions

4800S Series

Shielded Surface Mount Power Inductors

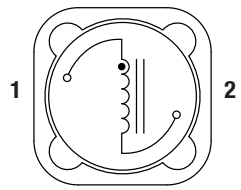
FEATURES

- RoHS compliant
- 1.0µH to 1.0mH
- Up to 10A I_{DC}
- Bobbin format
- Surface mount
- Integral EMI shield
- Compact size
- Tape and reel packaging
- UL 94V-0 materials
- J-STD-020-C reflow

DESCRIPTION

The 4800S series is a range of bobbin-wound, surface-mount inductors designed for use in switching power supply, and power line filter circuits. The parts are suitable for any application requiring a high saturation current in a low-profile package. The devices have an integral ferrite shield to reduce EMI.

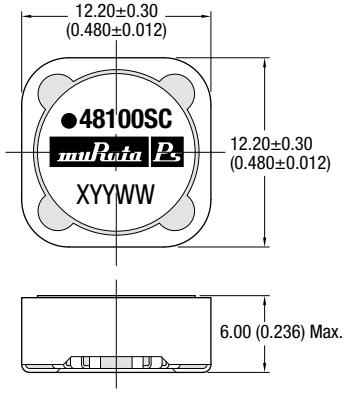
PIN CONNECTIONS (TOP VIEW)

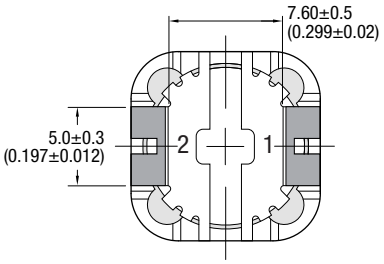


SELECTION GUIDE

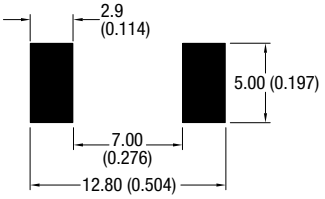
Order Code	Inductance (10kHz, 100mVAC) ±20%	DC Current[1]	DC Resistance	SRF	Q Factor	
	Nom.	Max.	Max.	Typ.	Typ.	
	µH	A	mΩ	MHz	Q	@ f (MHz)
481R0SC	1.0 (±30%)	10.0	6	83	35	1
482R2SC	2.2 (±30%)	8.2	10	48	36	1
483R3SC	3.3 (±30%)	7.3	12	39	34	1
484R7SC	4.7 (±30%)	6.3	16	28	34	1
486R8SC	6.8 (±30%)	5.1	21	26	34	1
48100SC	10	4.5	28	20	32	1
48150SC	15	3.7	40	17	31	1
48220SC	22	3.1	53	13	31	1
48330SC	33	2.8	73	11	31	1
48470SC	47	2.4	100	10	32	1
48680SC	68	1.8	145	9	33	1
48101SC	100	1.6	200	7	20	0.8
48151SC	150	1.35	280	6	23	0.8
48221SC	220	1.00	430	5	23	0.8
48331SC	330	0.85	630	5	22	0.8
48471SC	470	0.76	900	4	20	0.8
48681SC	680	0.66	1250	4	18	0.8
48102SC	1000	0.52	1850	4	17	0.8

MECHANICAL DIMENSIONS





Recommended Footprint Details



Dot signifies the innermost turn of the winding.
All dimensions in mm (inches). Package weight: 3.1g Typ.

ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40ºC to 85ºC
Storage temperature range	-40ºC to 125ºC

SOLDERING INFORMATION[2]

Peak reflow solder temperature	245˚C
Pin finish	Tin

Specifications typical at T_A = 25°C

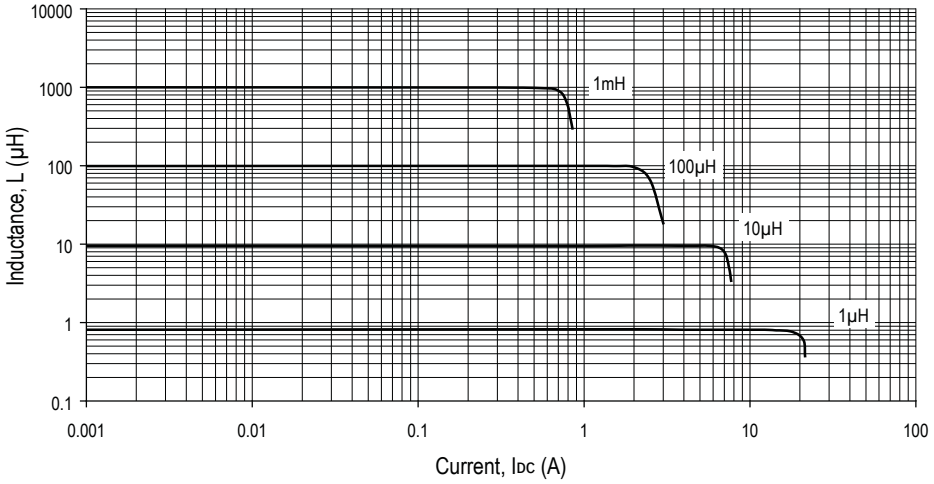
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

2 For further information, please visit www.murata-ps.com/rohs

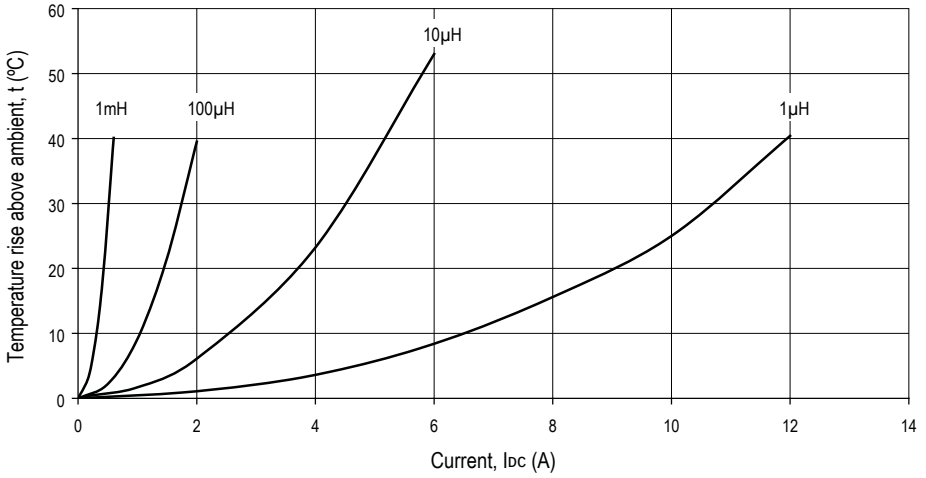
RoHS COMPLIANT 2002/95/EC

For full details go to
www.murata-ps.com/rohs

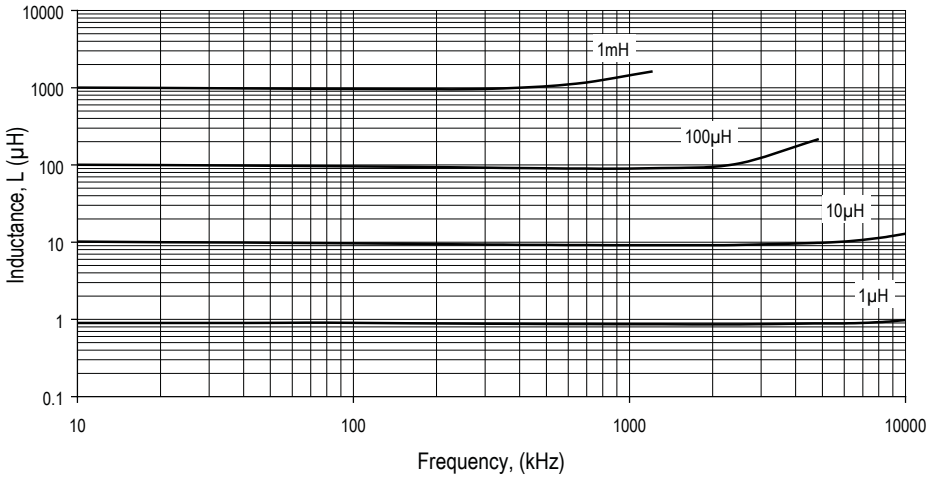
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

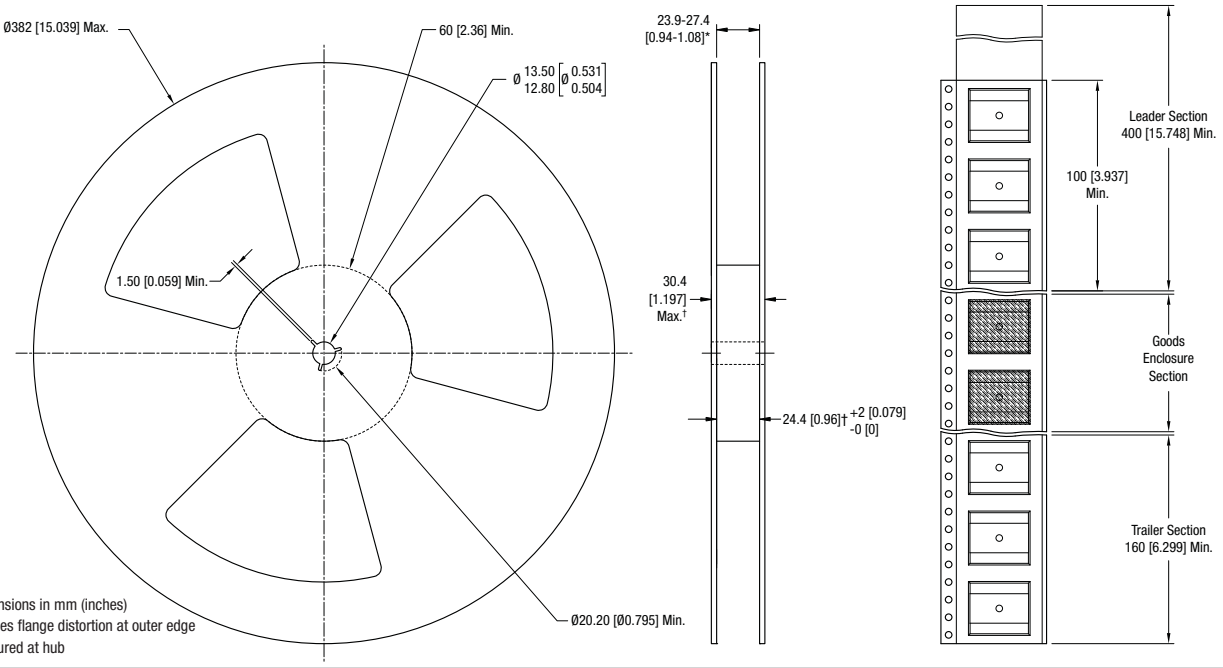


INDUCTANCE Vs FREQUENCY



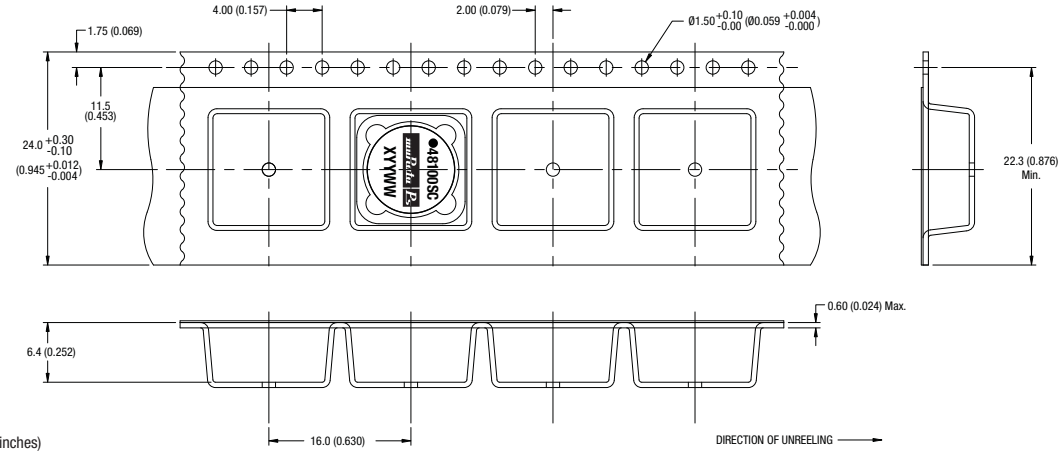
TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



All dimensions in mm (inches)
* Includes flange distortion at outer edge
† Measured at hub

TAPE OUTLINE DIMENSIONS



All dimensions in mm (inches)

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