Murata Power Solutions

4900S Series

Shielded Surface Mount Power Inductors

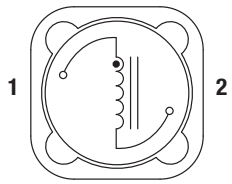
FEATURES

- RoHS compliant
- 1.0µH to 1mH
- Up to 11.8A 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 4900S 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.

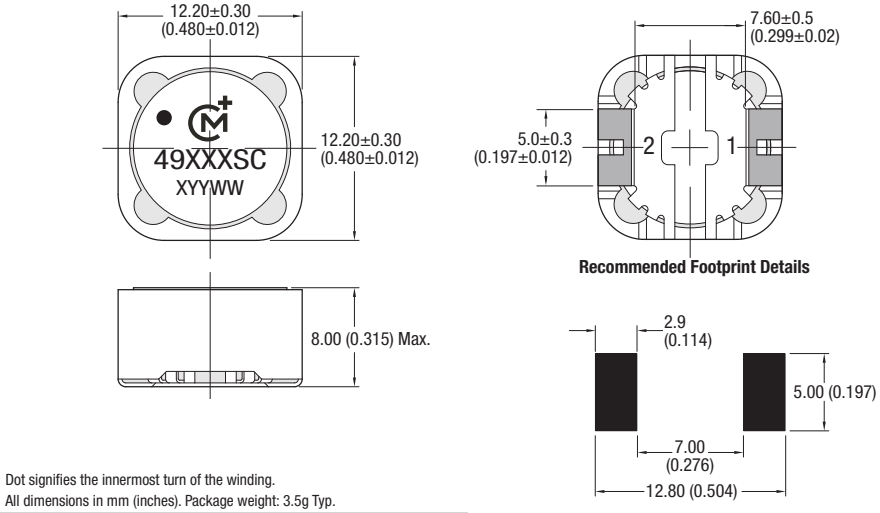
PIN CONNECTIONS (TOP VIEW)



SELECTION GUIDE

Order Code	Inductance (10kHz, 100mVAC) ±20%	DC Current[1]	DC Resistance	SRF	Q Factor		Recommended Alternative
	Nom.	Max.	Max.	Typ.	Typ.		
	µH	A	mΩ	MHz	Q	@ f (MHz)	
		To be discontinued					
491R0SC	1.0 (±30%)	11.8	5	91	32	1	Contact Murata
492R2SC	2.2 (±30%)	9.8	8	48	45	1	Contact Murata
493R3SC	3.3 (±30%)	8.4	10	37	42	1	Contact Murata
494R7SC	4.7 (±30%)	7.7	12	32	42	1	Contact Murata
496R8SC	6.8 (±30%)	6.2	16	24	43	1	Contact Murata
49100SC	10	5.1	21	19	43	1	Contact Murata
49150SC	15	4.4	27	16	44	1	Contact Murata
49220SC	22	3.1	42	12	46	1	Contact Murata
49330SC	33	2.9	60	10	51	1	Contact Murata
49470SC	47	2.3	100	9	52	1	Contact Murata
49680SC	68	2.0	143	7	47	1	Contact Murata
49101SC	100	1.6	165	6	40	0.8	Contact Murata
49151SC	150	1.3	250	5	35	0.8	Contact Murata
49221SC	220	1.1	380	4	36	0.8	Contact Murata
49331SC	330	0.90	550	4	33	0.8	Contact Murata
49471SC	470	0.75	810	4	37	0.8	Contact Murata
49681SC	680	0.62	1200	3	27	0.8	Contact Murata
49102SC	1000	0.50	1500	3	26	0.8	Contact Murata

MECHANICAL DIMENSIONS



Dot signifies the innermost turn of the winding.
All dimensions in mm (inches). Package weight: 3.5g 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

RoHS COMPLIANT

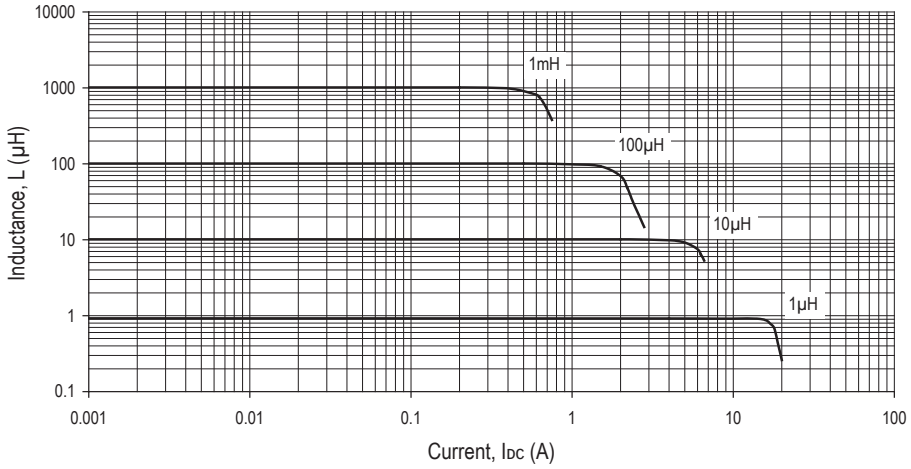
For full details go to
www.murata-ps.com/rohs

Specifications typical at T_A = 25°C

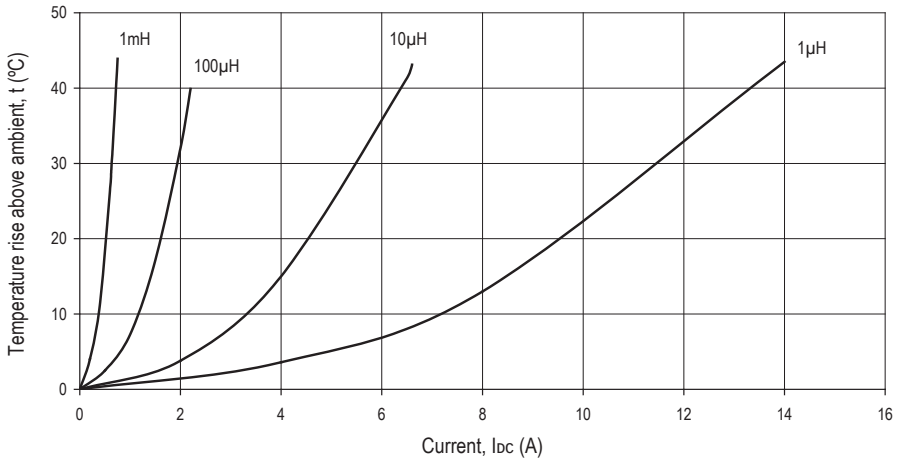
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

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

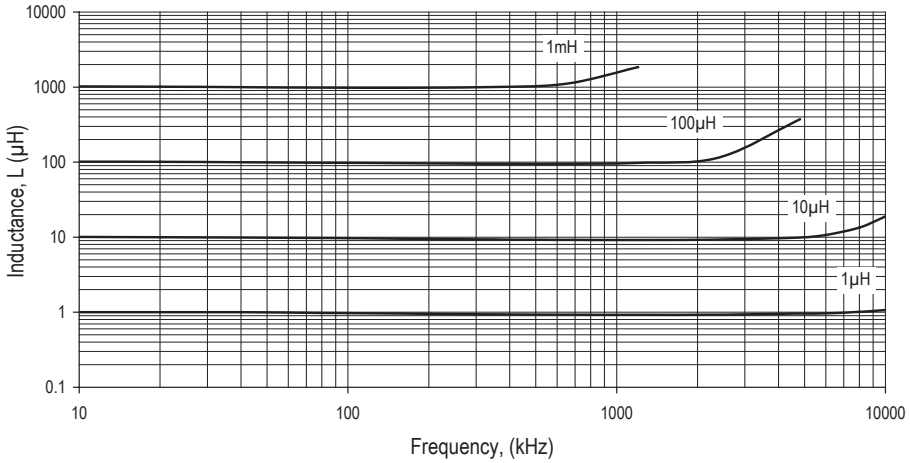
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

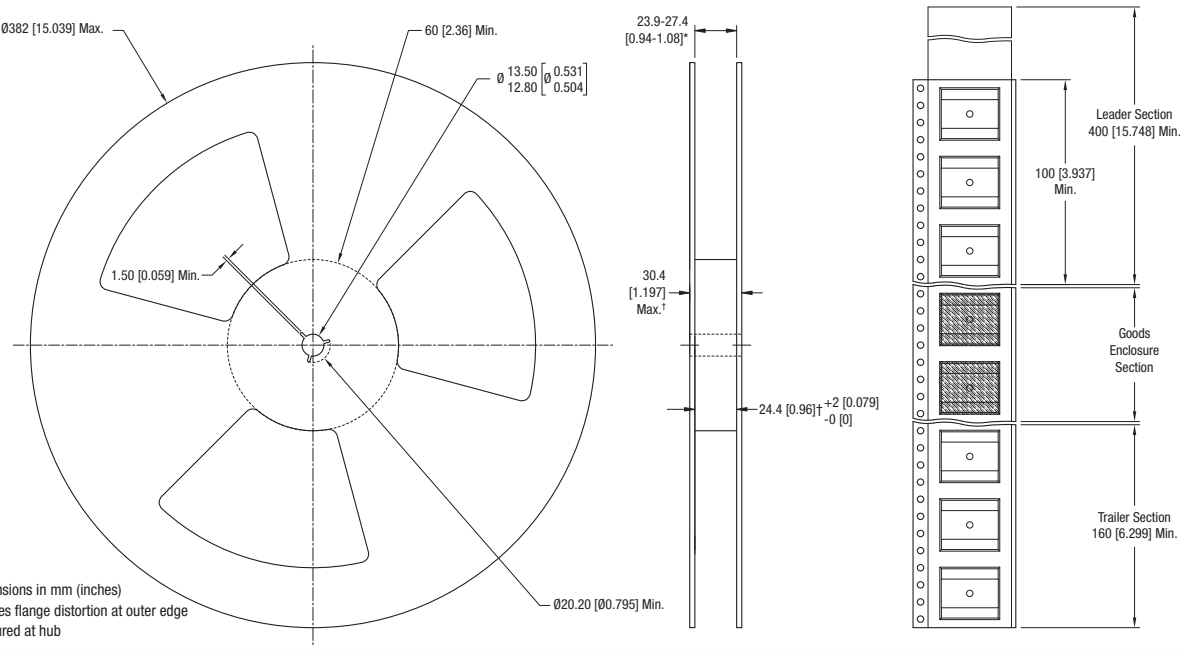


INDUCTANCE Vs FREQUENCY



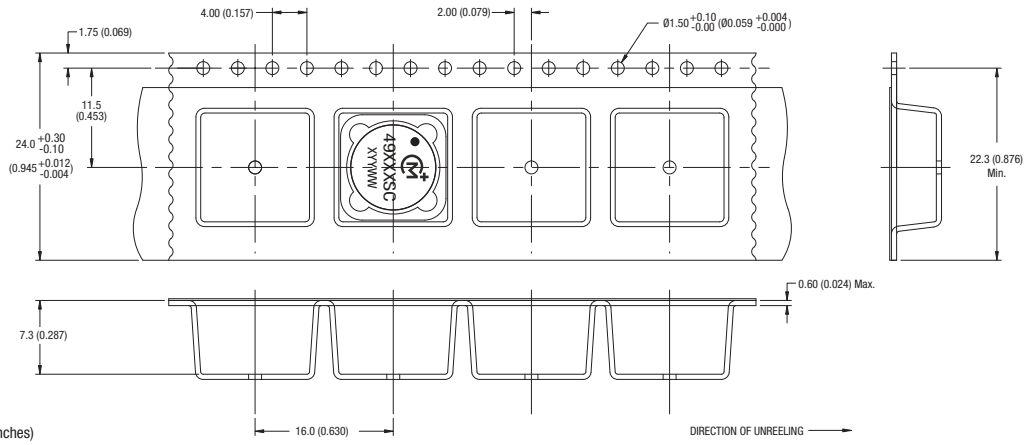
TAPE & REEL SPECIFICATIONS

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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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

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