



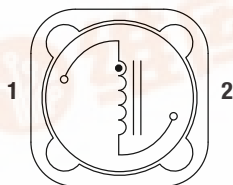
FEATURES

- RoHS compliant
- 1.0μH to 1mH
- Up to 11.8A *l*_{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.

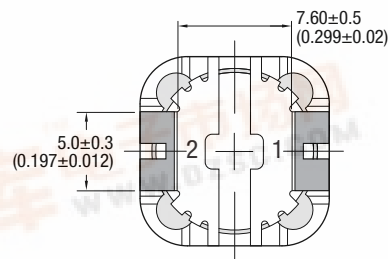
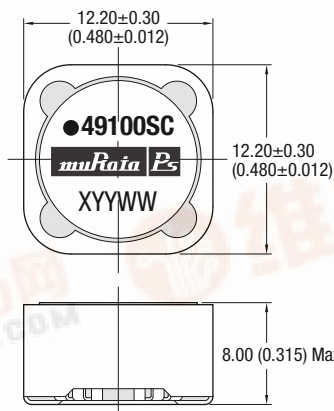
PIN CONNECTIONS (TOP VIEW)



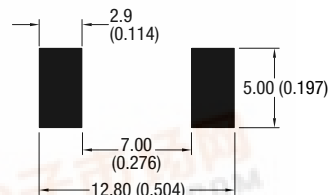
SELECTION GUIDE

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

MECHANICAL DIMENSIONS



Recommended Footprint Details



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	-40°C to 85°C
Storage temperature range	-40°C to 125°C

SOLDERING INFORMATION²

Peak reflow solder temperature	245°C
Pin finish	Tin

Specifications typical at T_A = 25°C

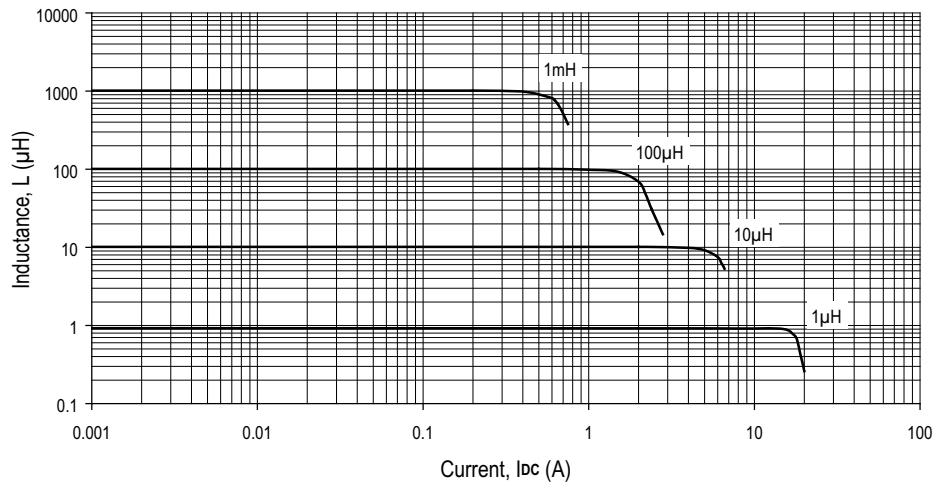
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

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

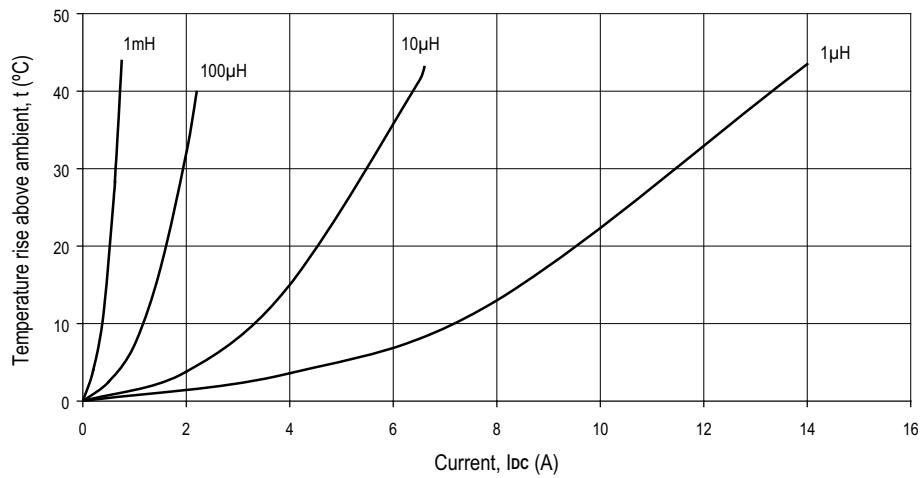


For full details go to
www.murata-ps.com/rohs

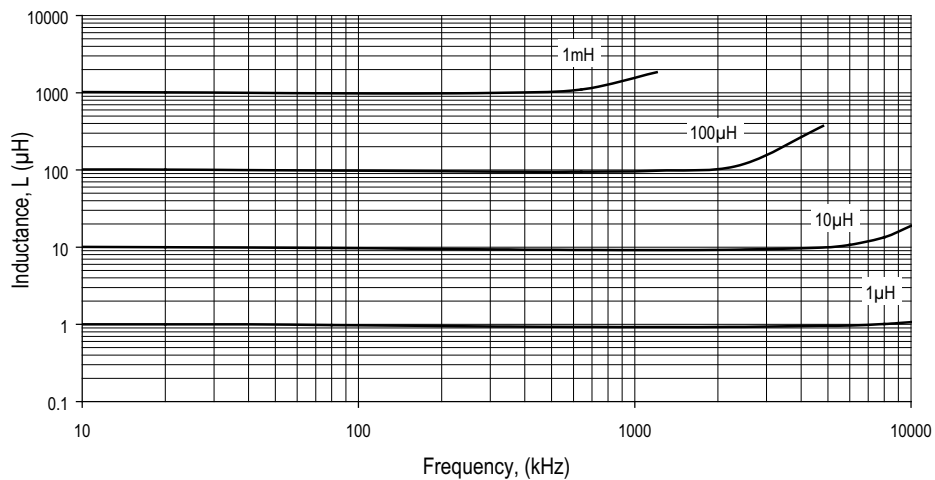
INDUCTANCE Vs CURRENT



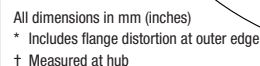
TEMPERATURE Vs CURRENT



INDUCTANCE Vs FREQUENCY



REEL OUTLINE DIMENSIONS



Technical drawing of a 12-pocket film canister, showing top, side, and bottom views with dimensions in inches and millimeters.

Top View Dimensions:

- Overall width: 1.75 (0.069)
- Distance from top edge to first hole: 4.00 (0.157)
- Distance between holes: 2.00 (0.079)
- Distance from last hole to top edge: 0.150 (+0.10, -0.00) (0.0059 +0.004, -0.000)
- Distance from top edge to center of first pocket: 11.5 (0.453)
- Distance from top edge to center of last pocket: 24.0 (+0.30, -0.10) (0.945 +0.012, -0.004)
- Distance between pocket centers: 16.0 (0.630)

Side View Dimensions:

- Overall height: 22.3 (0.876) Min.

Bottom View Dimensions:

- Overall width: 7.3 (0.287)
- Distance from bottom edge to top of first pocket: 0.60 (0.024) Max.

Other Details:

- The central pocket contains a label with the text: "9100SC", "mm 28/28", "12", "XYWW".
- The drawing indicates the "DIRECTION OF UNREELING" with an arrow pointing to the right.

All dimensions in mm (inches)

DIRECTION OF UNREELING