



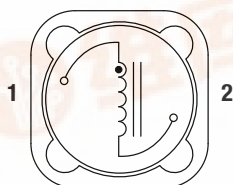
FEATURES

- RoHS compliant
- 1.0µH to 1.0mH
- Up to 10A 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 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.

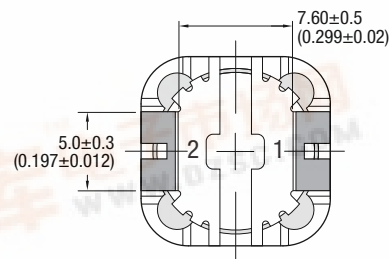
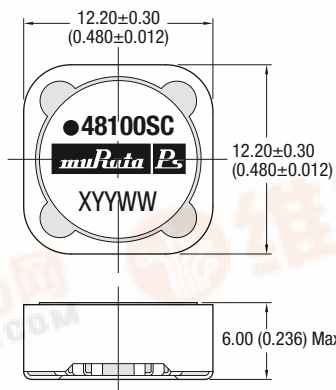
PIN CONNECTIONS (TOP VIEW)



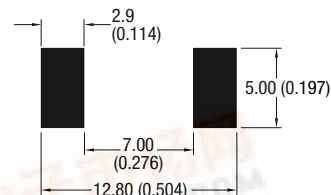
SELECTION GUIDE

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	-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

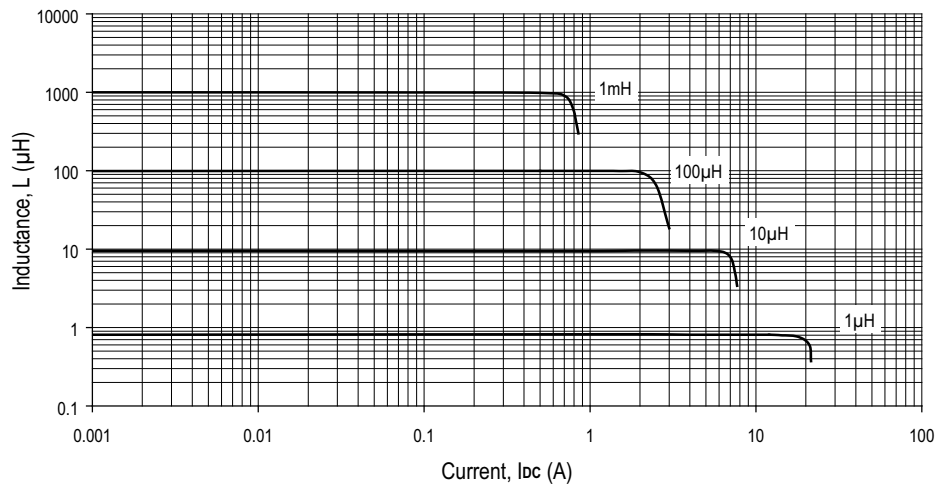
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

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

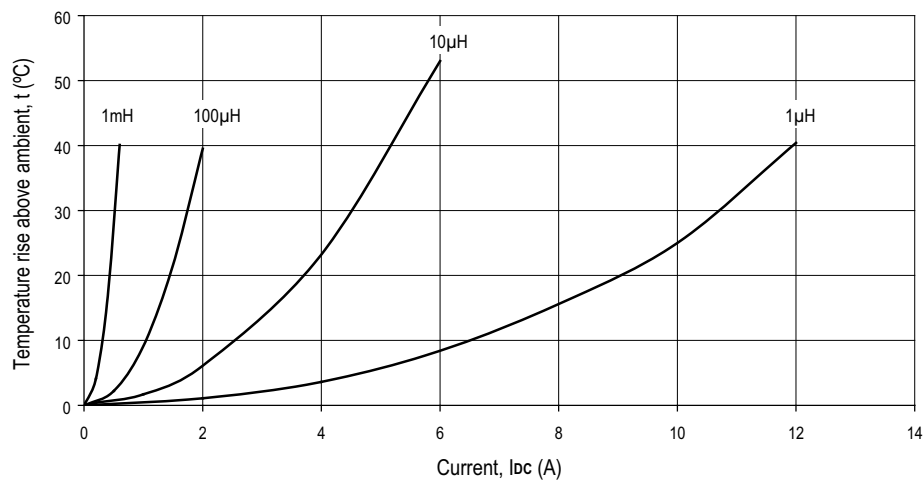


For full details go to
www.murata-ps.com/rohs

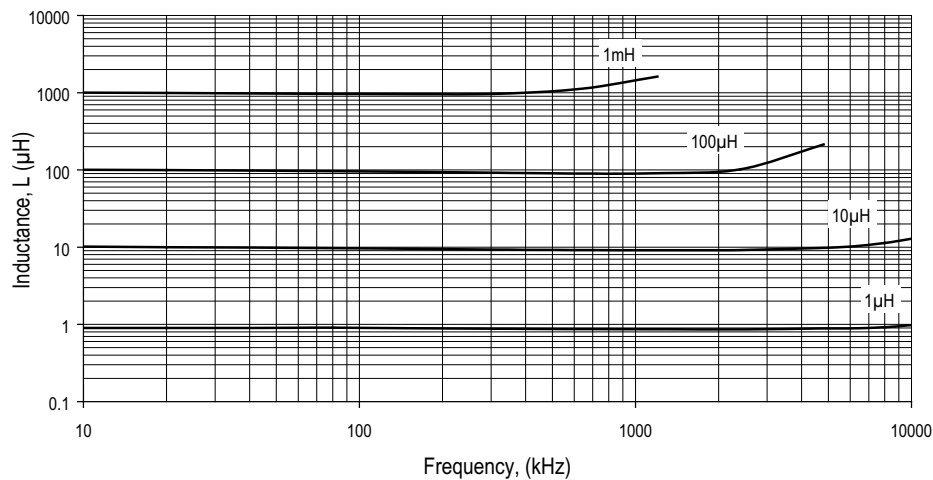
INDUCTANCE Vs CURRENT



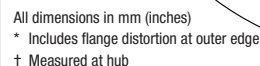
TEMPERATURE Vs CURRENT



INDUCTANCE Vs FREQUENCY



REEL OUTLINE DIMENSIONS



Technical drawing of a 12-inch wide, 24-inch long metal tray. The drawing includes a top view and a side view.

Top View Dimensions:

- Overall width: 12.00 (0.079)
- Overall length: 24.0 (+0.30, -0.10) (0.945 (+0.012, -0.004))
- Distance from left edge to first hole: 1.75 (0.069)
- Distance between holes: 4.00 (0.157)
- Distance from last hole to right edge: 2.00 (0.079)
- Hole diameter: $\varnothing 1.50$ (+0.10, -0.00) (0.059 (+0.004, -0.000))
- Distance from top edge to center of holes: 11.5 (0.453)
- Distance from bottom edge to center of holes: 11.5 (0.453)

Side View Dimensions:

- Overall height: 22.3 (0.876) Min.
- Top flange height: 0.60 (0.024) Max.

Other Features:

- The tray has a central circular logo with the text "44810035", "24", "12", "XXYY", and "Z".
- The tray has a wavy bottom edge.
- The side view shows a U-shaped profile with a flat top flange.
- The drawing is labeled "DIRECTION OF UNREELING" with an arrow pointing to the right.

All dimensions in mm (inches)

DIRECTION OF UNREELING