



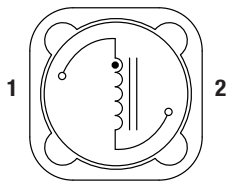
FEATURES

- 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 4700S 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.

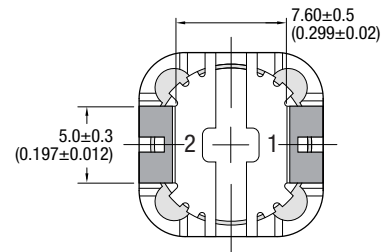
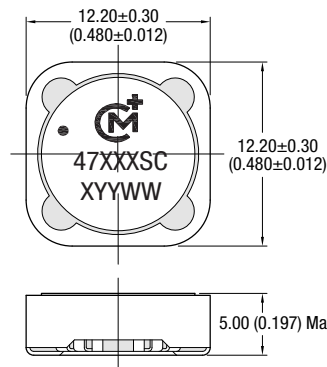
PIN CONNECTIONS (TOP VIEW)



SELECTION GUIDE

| Order Code | Inductance (10kHz, 100mV _{AC}) ±20% | DC Current ¹ | DC Resistance | SRF | Q Factor | |
|---------------------------|---|-------------------------|---------------|------|----------|-----------|
| | Nom. | Max. | Max. | Typ. | Typ. | |
| | μH | A | mΩ | MHz | Q | @ f (MHz) |
| To Be Discontinued | | | | | | |
| 471R0SC | 1.0 (±30%) | 10.0 | 4.8 | 79 | 24 | 1 |
| 472R2SC | 2.2 (±30%) | 7.0 | 8.5 | 44 | 24 | 1 |
| 473R3SC | 3.3 (±30%) | 6.4 | 11.1 | 36 | 25 | 1 |
| 474R7SC | 4.7 (±30%) | 5.8 | 16.4 | 34 | 25 | 1 |
| 476R8SC | 6.8 (±30%) | 4.6 | 26.9 | 24 | 24 | 1 |
| 47100SC | 10 | 3.8 | 32.3 | 22 | 22 | 1 |
| 47150SC | 15 | 3.2 | 46.5 | 18 | 29 | 1 |
| 47220SC | 22 | 2.7 | 62.9 | 14 | 29 | 1 |
| 47330SC | 33 | 2.2 | 91.1 | 13 | 23 | 1 |
| 47470SC | 47 | 1.9 | 168 | 11 | 23 | 1 |
| 47680SC | 68 | 1.6 | 210 | 9 | 23 | 1 |
| 47101SC | 100 | 1.3 | 267 | 8 | 20 | 0.8 |
| 47151SC | 150 | 1.1 | 410 | 7 | 19 | 0.8 |
| 47221SC | 220 | 0.8 | 629 | 6 | 20 | 0.8 |
| 47331SC | 330 | 0.7 | 940 | 5 | 21 | 0.8 |
| 47471SC | 470 | 0.58 | 1330 | 5 | 23 | 0.8 |
| 47681SC | 680 | 0.48 | 1780 | 4 | 17 | 0.8 |
| 47102SC | 1000 | 0.40 | 2540 | 4 | 17 | 0.8 |

MECHANICAL DIMENSIONS



Recommended Footprint Details

Dot signifies the innermost turn of the winding.
All dimensions in mm (inches). Package weight: 2.4g 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 |

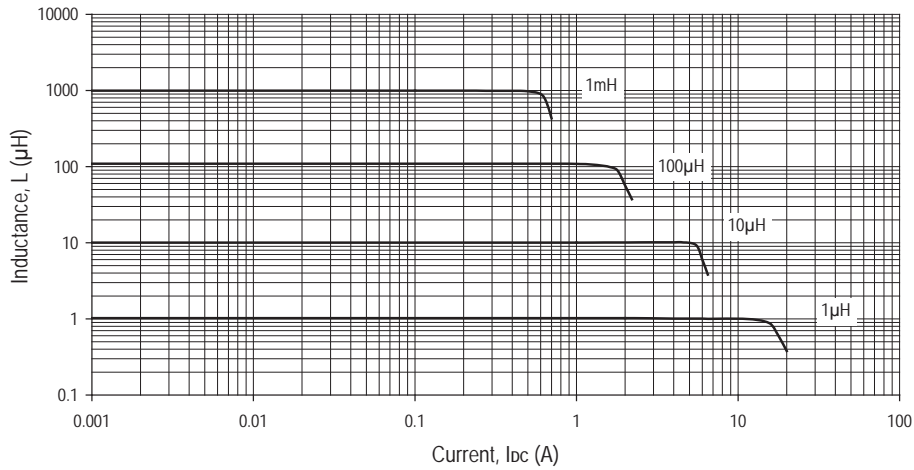
Specifications typical at T_A = 25°C

- 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

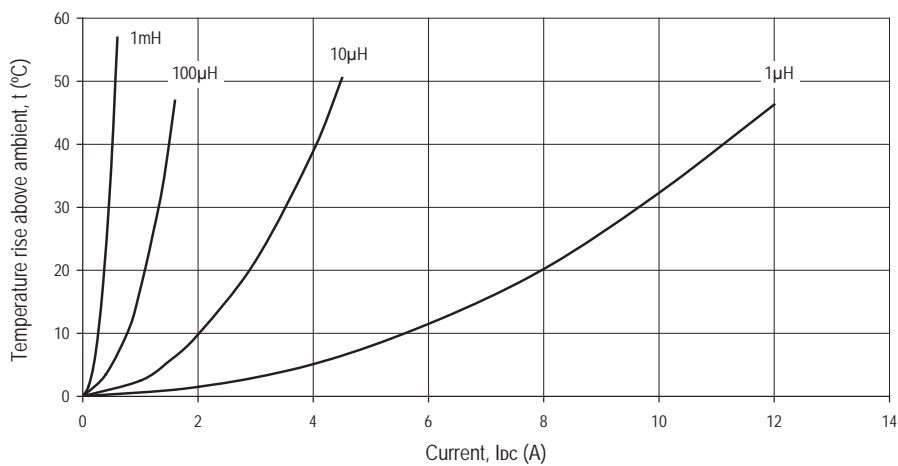


For full details go to
www.murata-ps.com/rohs

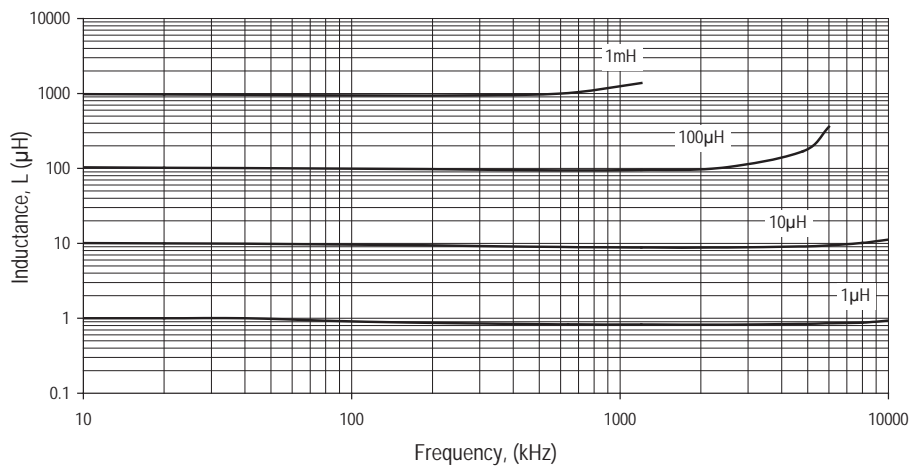
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

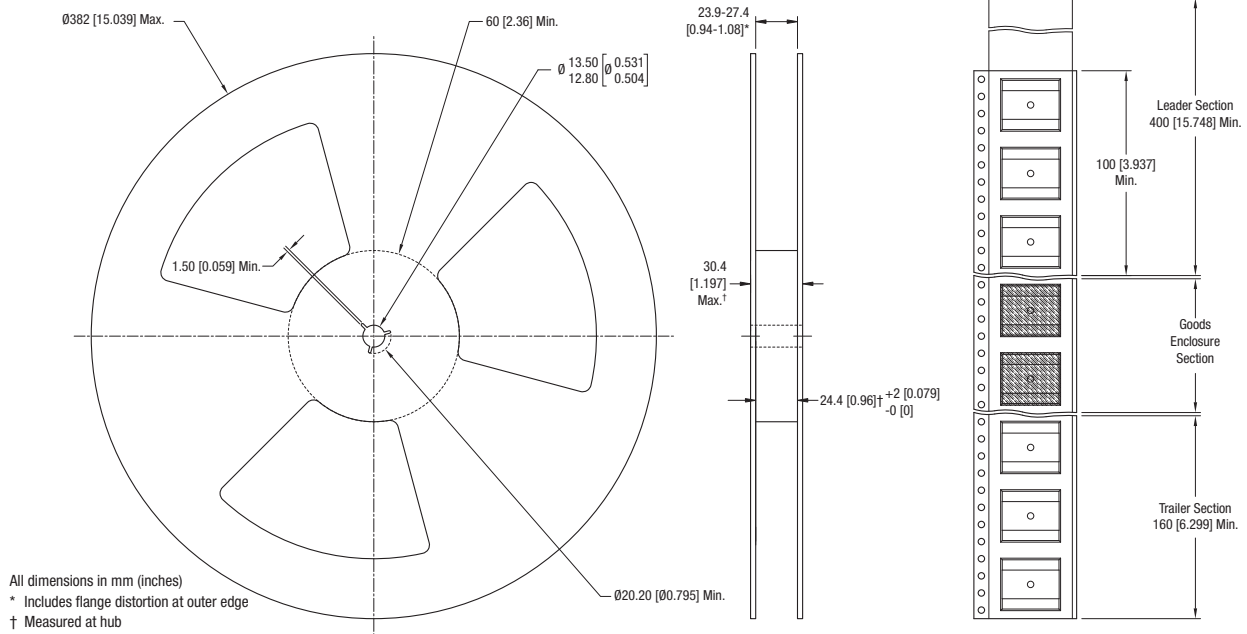


INDUCTANCE Vs FREQUENCY

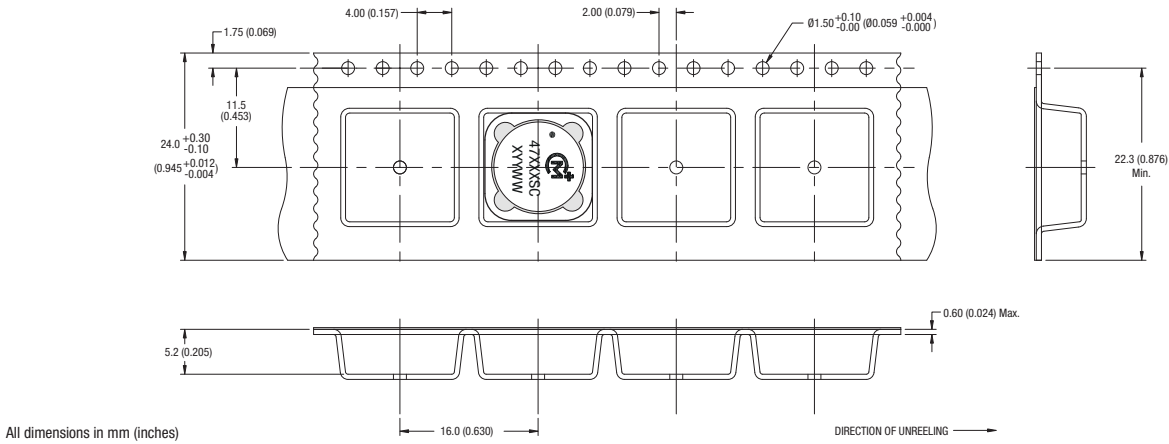


TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



TAPE OUTLINE DIMENSIONS



Murata Power Solutions, Inc.
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 ISO 9001 and 14001 REGISTERED

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