

48102SC Datasheet

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DiGi Electronics Part Number	48102SC-DG
Manufacturer	Murata Power Solutions Inc.
Manufacturer Product Number	48102SC
Description	FIXED IND 1MH 520MA 1.85 OHM SMD
Detailed Description	1 mH Shielded Wirewound Inductor 520 mA 1.85Ohm Max Nonstandard, 4 Lead



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.

Purchase and inquiry

Manufacturer Product Number:

48102SC

Series:

4800S

Type:

Wirewound

Inductance:

1 mH

Current Rating (Amps):

520 mA

Shielding:

Shielded

Q @ Freq:

17 @ 800kHz

Ratings:

-

Inductance Frequency - Test:

10 kHz

Package / Case:

Nonstandard, 4 Lead

Size / Dimension:

0.480" L x 0.480" W (12.20mm x 12.20mm)

Base Product Number:

48

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

±20%

Current - Saturation (Isat):

-

DC Resistance (DCR):

1.850hm Max

Frequency - Self Resonant:

4MHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.236" (6.00mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



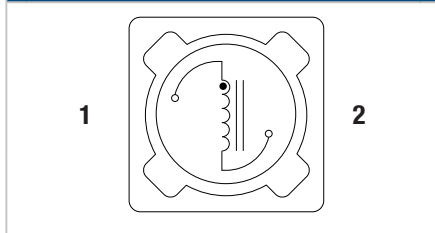
FEATURES

- 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.

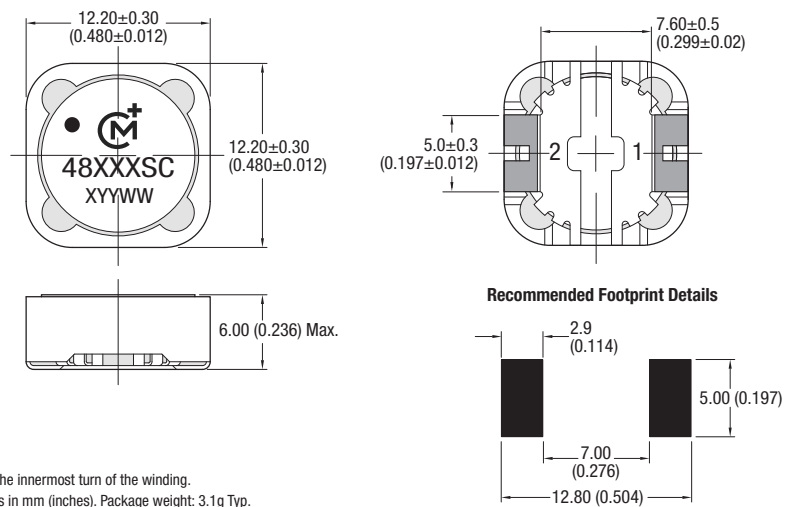
PIN CONNECTIONS (TOP VIEW)



SELECTION GUIDE

Order Code	Inductance (10kHz, 100mV _{AC}) ±20%	DC Current ¹	DC Resistance	SRF	Q Factor	
	Nom. μH	Max. A	Max. mΩ	Typ. MHz	Typ. Q @ f (MHz)	
	481R0SC	1.0 (±30%)	10.0	6	83	35
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



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

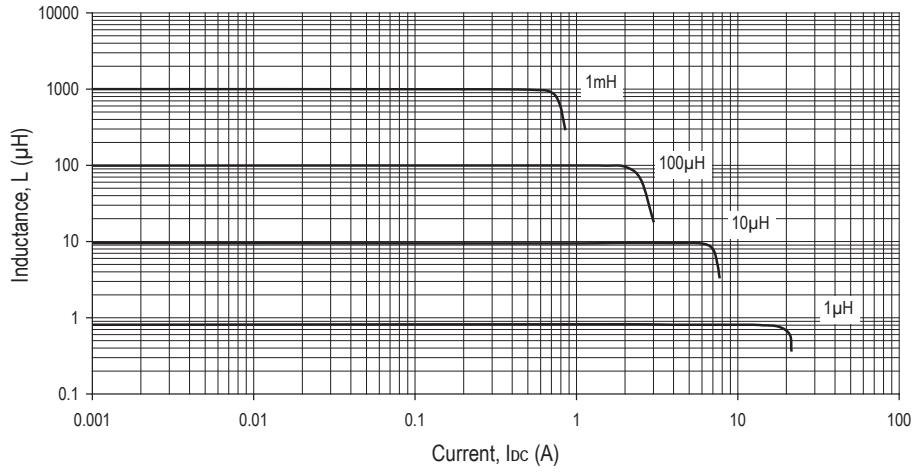
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

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

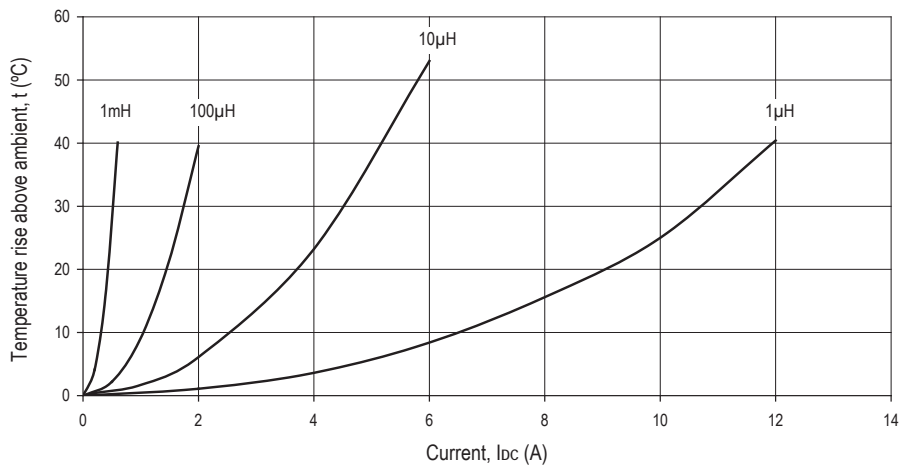


For full details go to
www.murata-ps.com/rohs

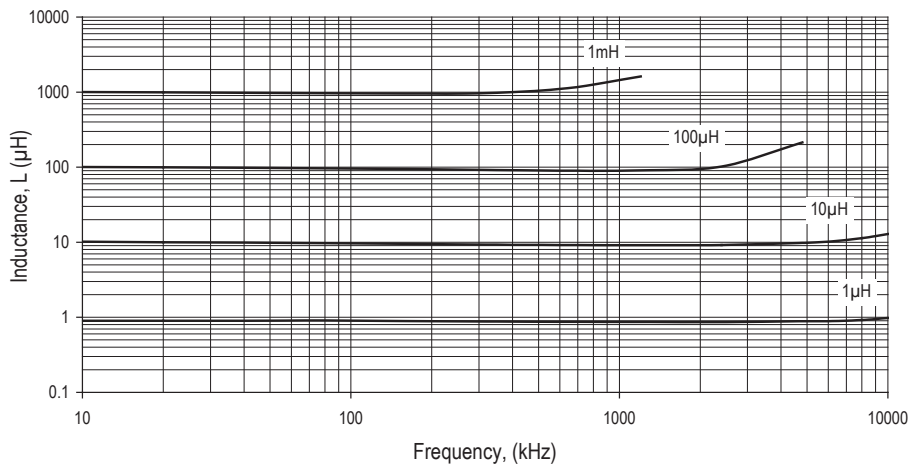
INDUCTANCE Vs CURRENT



TEMPERATURE Vs CURRENT

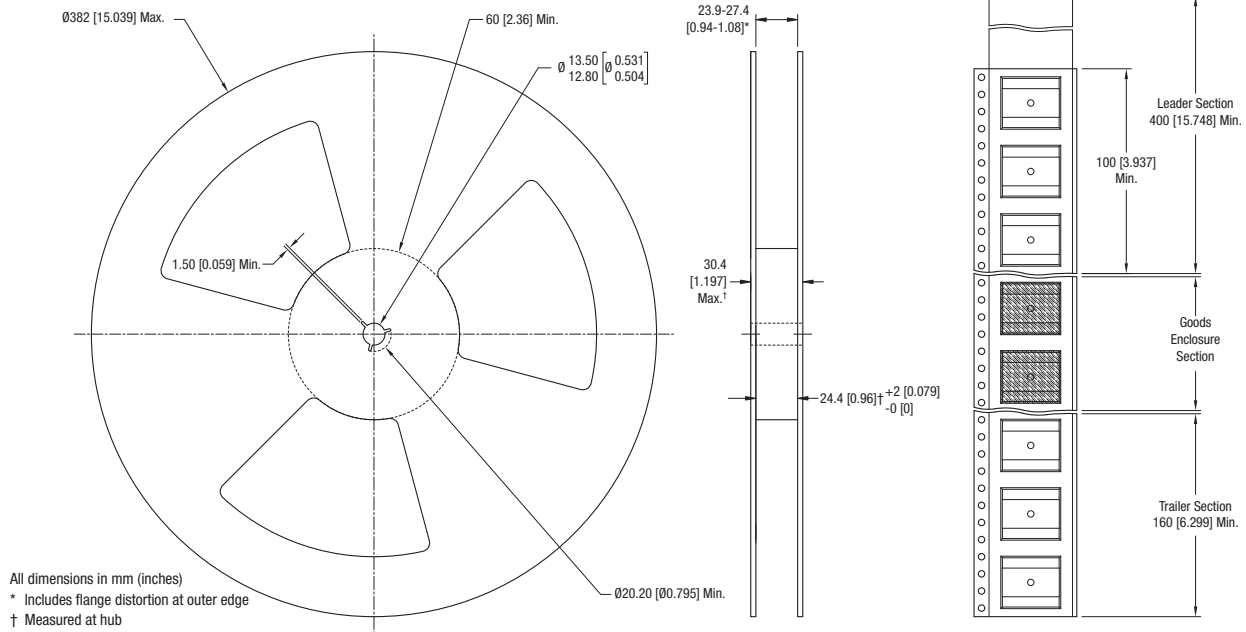


INDUCTANCE Vs FREQUENCY

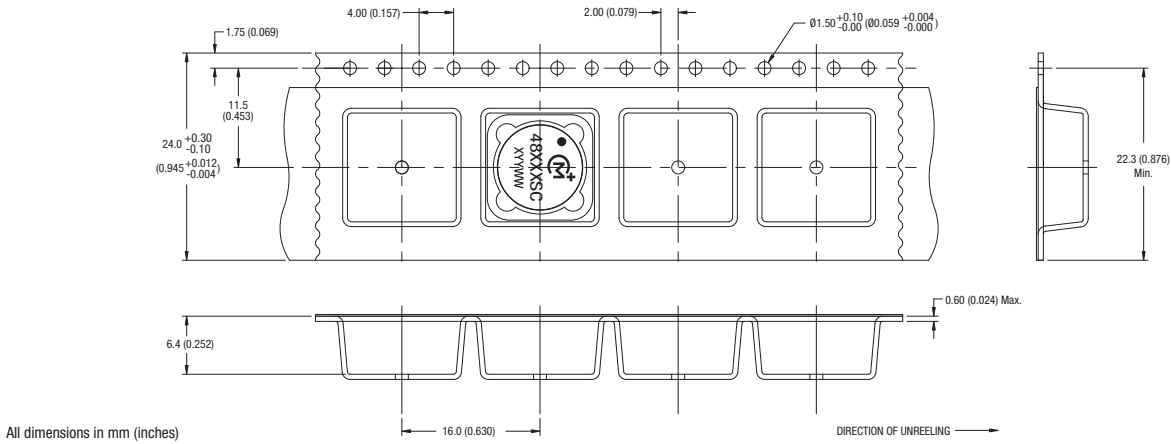


TAPE & REEL SPECIFICATIONS

REEL OUTLINE DIMENSIONS



TAPE OUTLINE DIMENSIONS



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- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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