

# 491R0SC Datasheet

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DiGi Electronics Part Number	491R0SC-DG
Manufacturer	<a href="#">Murata Power Solutions Inc.</a>
Manufacturer Product Number	491R0SC
Description	FIXED IND 1UH 11.8A 5 MOHM SMD
Detailed Description	1 $\mu$ H Shielded Wirewound Inductor 11.8 A 5mOhm Max Nonstandard, 4 Lead



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## Purchase and inquiry

Manufacturer Product Number:

491R0SC

Series:

4900S

Type:

Wirewound

Inductance:

1  $\mu$ H

Current Rating (Amps):

11.8 A

Shielding:

Shielded

Q @ Freq:

32 @ 1MHz

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:

49

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

$\pm$ 30%

Current - Saturation (Isat):

-

DC Resistance (DCR):

5mOhm Max

Frequency - Self Resonant:

91MHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

-

Height - Seated (Max):

0.315" (8.00mm)

## Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



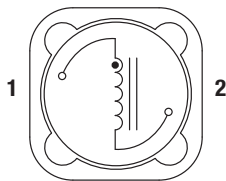
## FEATURES

- RoHS compliant
- 1.0μH to 1mH
- Up to 11.8A I<sub>DC</sub>
- 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.

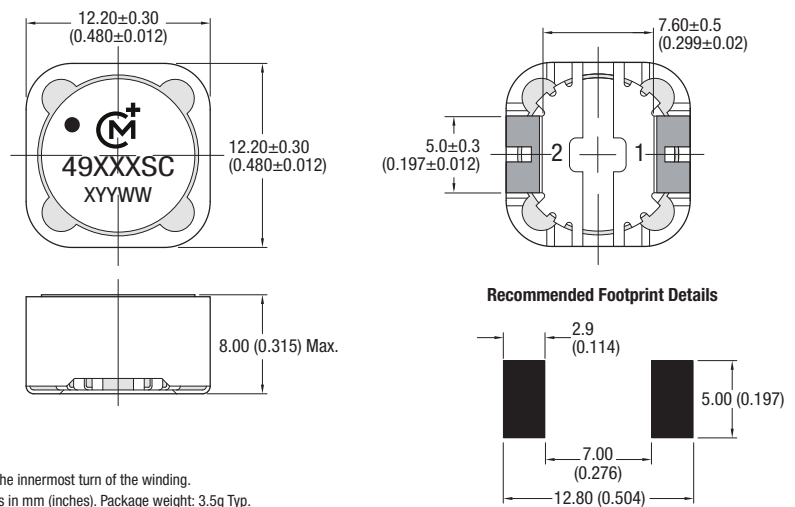
## PIN CONNECTIONS (TOP VIEW)



## SELECTION GUIDE

Order Code	Inductance (10kHz, 100mV <sub>AC</sub> ) ±20%	DC Current <sup>1</sup>	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



## ABSOLUTE MAXIMUM RATINGS

Operating free air temperature range	-40°C to 85°C
Storage temperature range	-40°C to 125°C

## SOLDERING INFORMATION<sup>2</sup>

Peak reflow solder temperature	245°C
Pin finish	Tin

Specifications typical at T<sub>a</sub> = 25°C

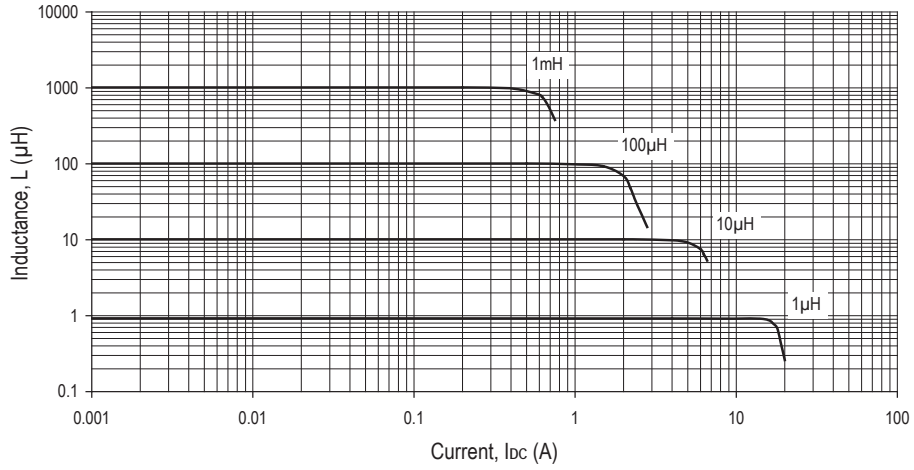
1 Maximum DC current occurs when either the inductance falls to 75% of its nominal value or when its temperature rise reaches 40°C, whichever is sooner.

2 For further information, please visit [www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

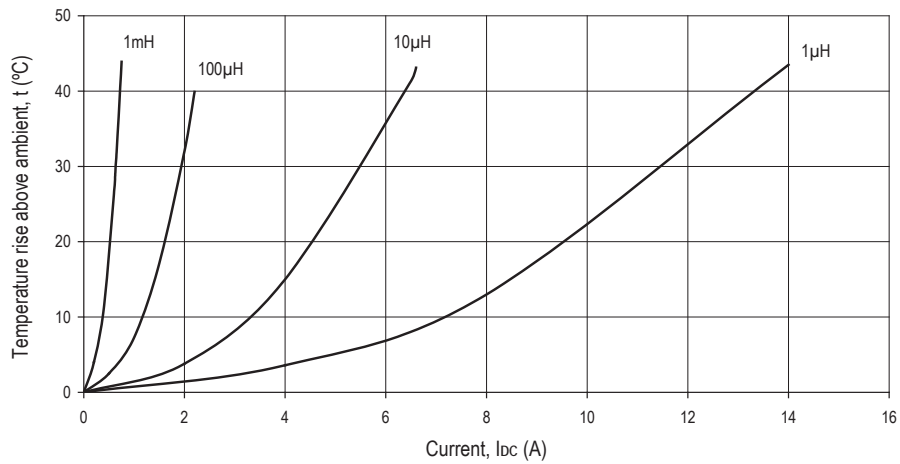


For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)

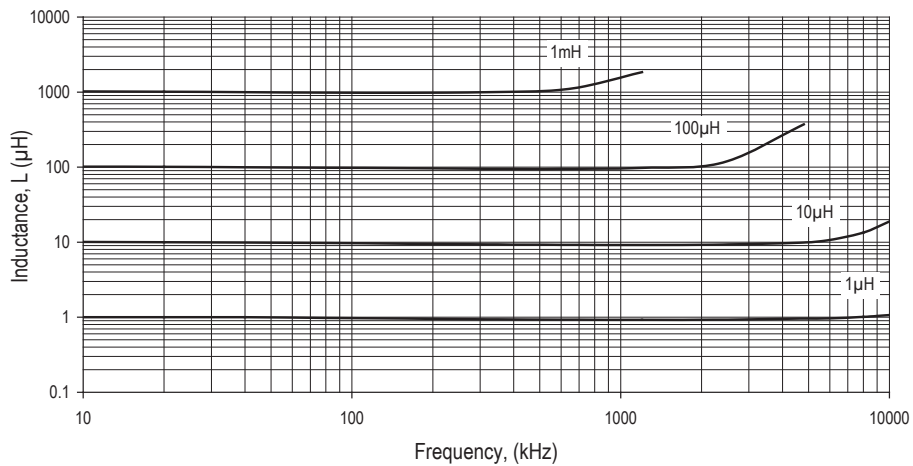
**INDUCTANCE Vs CURRENT**



**TEMPERATURE Vs CURRENT**

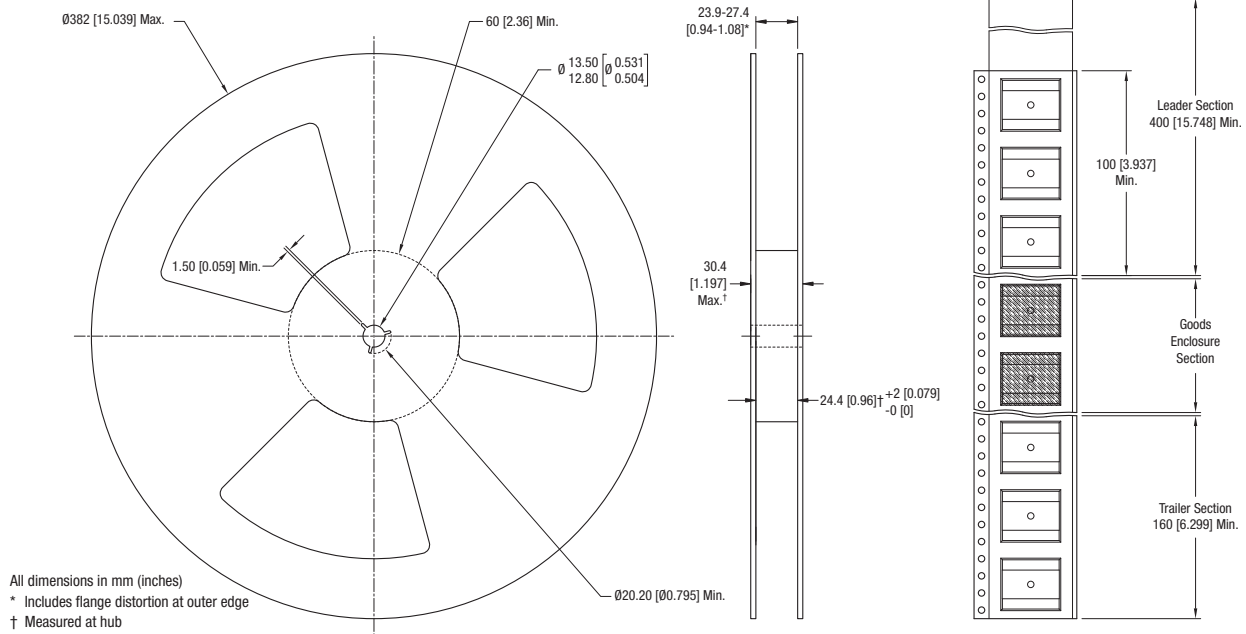


**INDUCTANCE Vs FREQUENCY**

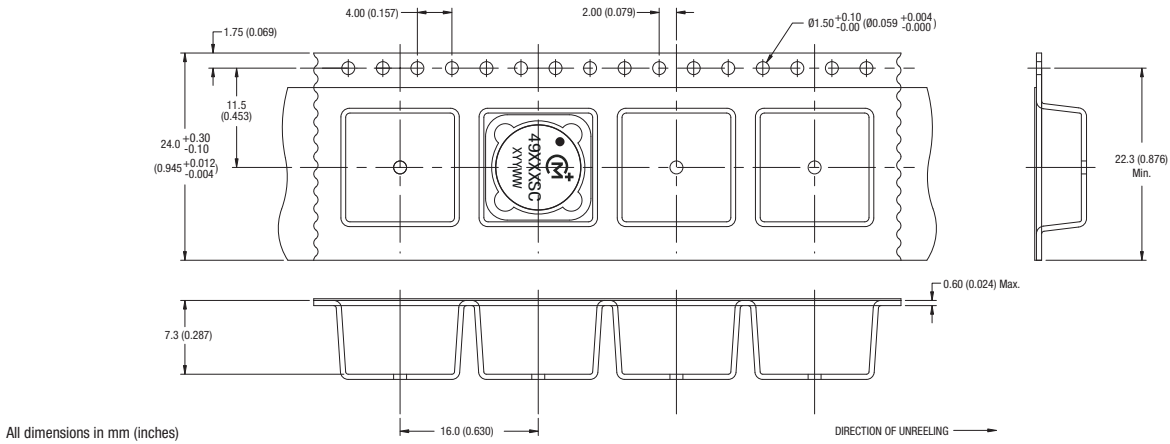


**TAPE & REEL SPECIFICATIONS**

**REEL OUTLINE DIMENSIONS**



**TAPE OUTLINE DIMENSIONS**



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