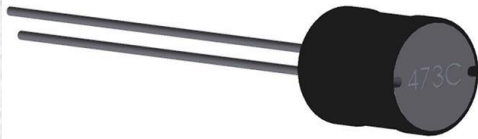


13R686C Datasheet

www.digi-electronics.com



<https://www.DiGi-Electronics.com>

DiGi Electronics Part Number	13R686C-DG
Manufacturer	Murata Power Solutions Inc.
Manufacturer Product Number	13R686C
Description	FIXED IND 68MH 40MA 152 OHM TH
Detailed Description	68 mH Unshielded Wirewound Inductor 40 mA 152 Ohm Max Radial, Vertical Cylinder



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:

13R686C

Series:

1300R

Type:

Wirewound

Inductance:

68 mH

Current Rating (Amps):

40 mA

Shielding:

Unshielded

Q @ Freq:

-

Ratings:

-

Inductance Frequency - Test:

1 kHz

Package / Case:

Radial, Vertical Cylinder

Size / Dimension:

0.374" Dia (9.50mm)

Base Product Number:

13R

Manufacturer:

Murata Power Solutions Inc.

Product Status:

Active

Material - Core:

-

Tolerance:

±10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

1520hm Max

Frequency - Self Resonant:

-

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Through Hole

Supplier Device Package:

-

Height - Seated (Max):

0.531" (13.50mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

Not Applicable

ECCN:

EAR99



FEATURES

- RoHS compliant
- Radial format
- Up to 6.3A Ioc
- 1.5μH to 68mH
- Low DC resistance
- UL VW-1 rated sleeving
- Backward compatible with Sn/Pb soldering systems
- Custom parts available

DESCRIPTION

The 1300R Series is a general purpose range of inductors suitable for low to medium current applications such as power supply and other general purpose filtering designs.

SELECTION GUIDE

Order Code	Inductance (1kHz, 0.1V _{AC})	DC Current ¹	DC Resistance
	±10%	Max.	Max.
	μH	A	Ω
13R152C	1.5 ±20%	6.3	0.008
13R222C	2.2 ±20%	5.3	0.010
13R332C	3.3 ±20%	4.8	0.013
13R472C	4.7 ±20%	4.3	0.017
13R682C	6.8 ±20%	3.5	0.023
13R103C	10	3.0	0.031
13R153C	15	2.5	0.042
13R223C	22	2.0	0.070
13R333C	33	1.8	0.092
13R473C	47	1.5	0.110
13R683C	68	1.3	0.150
13R104C	100	1.0	0.240
13R154C	150	0.82	0.330
13R224C	220	0.70	0.470
13R334C	330	0.58	0.640
13R474C	470	0.45	1.05
13R684C	680	0.42	1.50
13R105C	1.0mH	0.33	2.10
13R155C	1.5mH	0.28	3.10
13R225C	2.2mH	0.24	4.50
13R335C	3.3mH	0.19	7.0
13R475C	4.7mH	0.16	9.3
13R685C	6.8mH	0.13	13.5
13R106C	10mH	0.085	23.8
13R156C	15mH	0.080	31.0
13R226C	22mH	0.070	48.0
13R336C	33mH	0.060	68.0
13R476C	47mH	0.045	120.0
13R686C	68mH	0.040	152.0

ABSOLUTE MAXIMUM RATINGS

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

SOLDERING INFORMATION²

Peak wave solder temperature	260°C for 10 seconds
Pin finish	Bright tin

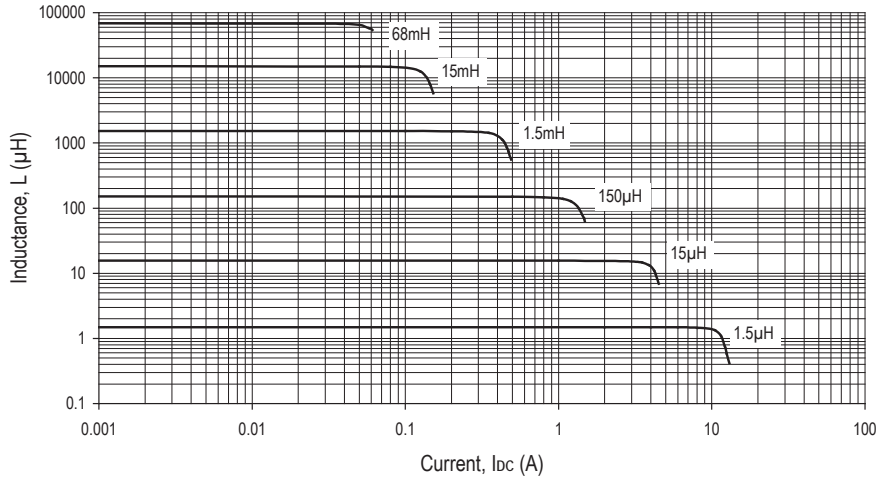


For full details go to
www.murata-ps.com/rohs

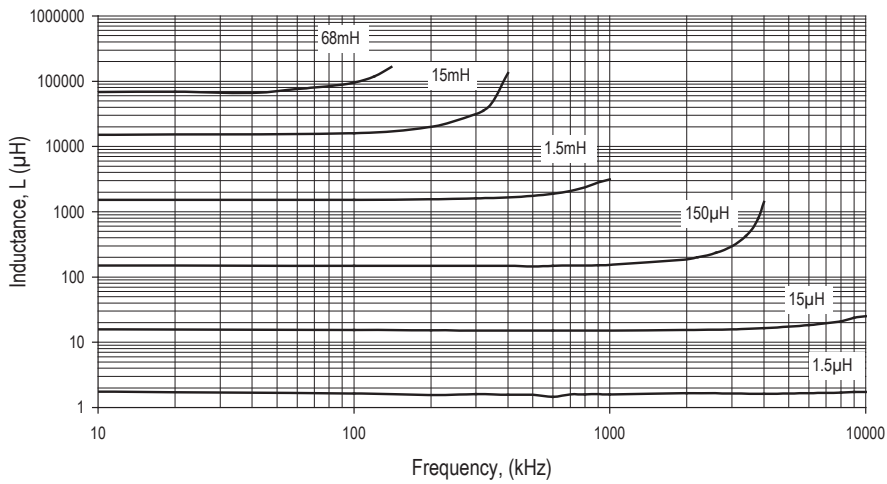
All specifications typical at T_a=25°C

- 1 Maximum DC current occurs when either the inductance falls to 90% of its nominal value or when its temperature rise reaches 30°C, whichever is sooner.
- 2 For further information, please visit www.murata-ps.com/rohs

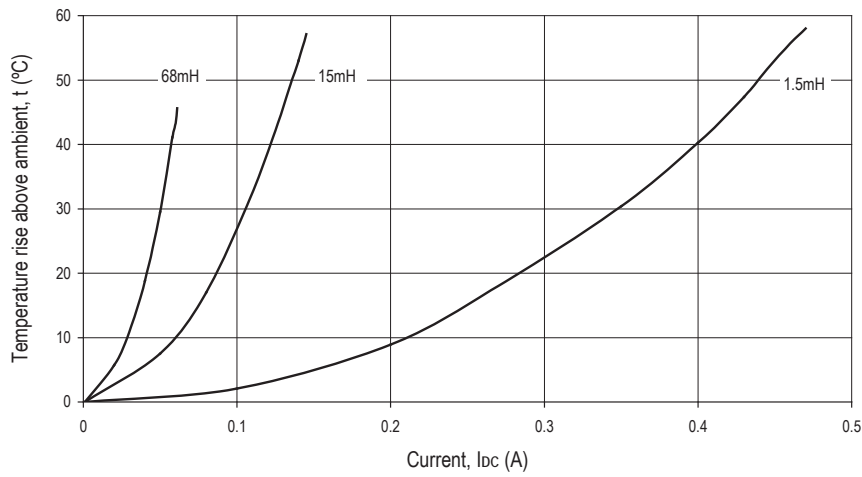
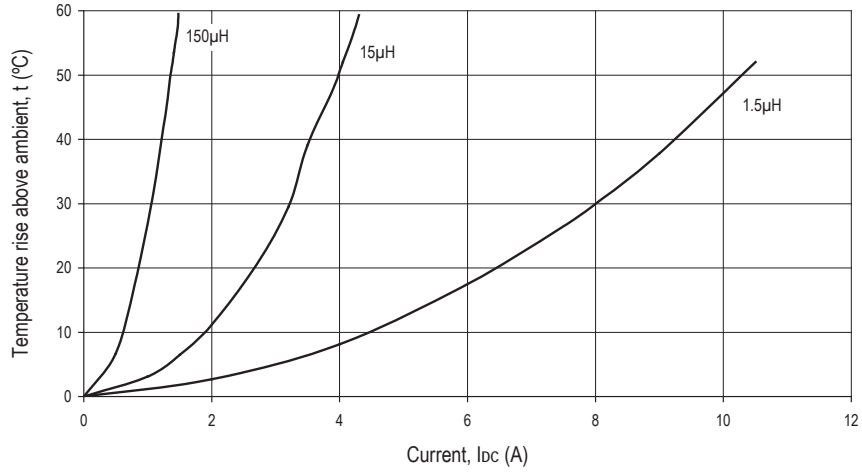
INDUCTANCE Vs CURRENT



INDUCTANCE Vs FREQUENCY

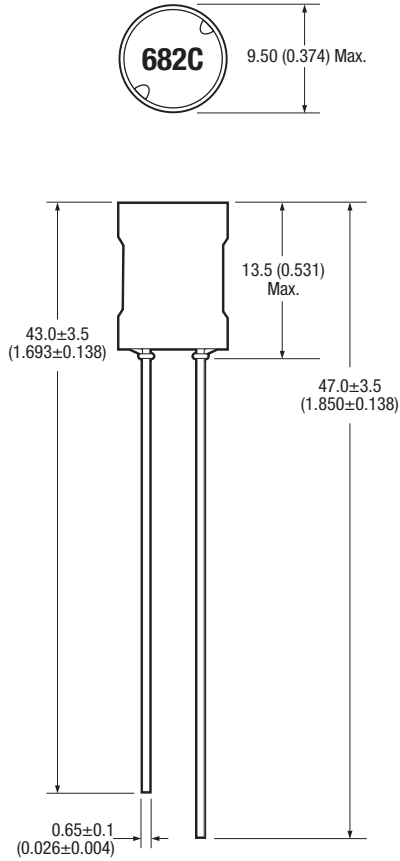


TEMPERATURE vs CURRENT



PACKAGE SPECIFICATIONS

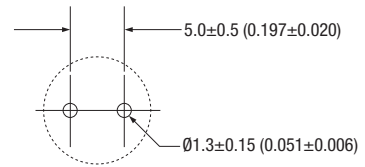
MECHANICAL DIMENSIONS



All dimensions in mm (inches).

Package weight 2.4g Typ.

RECOMMENDED FOOTPRINT DETAILS



All dimensions in mm (inches)

PACKAGING DETAILS

Supplied in cartons (200 pieces per carton)

DISCLAIMER

Unless otherwise stated in the datasheet, all products are designed for standard commercial and industrial applications and NOT for safety-critical and/or life-critical applications.

Particularly for safety-critical and/or life-critical applications, i.e. applications that may directly endanger or cause the loss of life, inflict bodily harm and/or loss or severe damage to equipment/property, and severely harm the environment, a prior explicit written approval from Murata is strictly required. Any use of Murata standard products for any safety-critical, life-critical or any related applications without any prior explicit written approval from Murata shall be deemed unauthorised use.

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- Aerospace equipment
- Undersea equipment
- Power plant control equipment
- Medical equipment
- Transportation equipment (automobiles, trains, ships, etc.)
- Traffic signal equipment
- Disaster prevention / crime prevention equipment
- Data Processing equipment

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