

IFCB0402ER1N5S Datasheet



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DiGi Electronics Part Number	IFCB0402ER1N5S-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	IFCB0402ER1N5S
Description	FIXED IND 1.5NH 700MA 250MOHM SM
Detailed Description	1.5 nH Unshielded Thin Film Inductor 700 mA 250m Ohm Max 0402 (1005 Metric)



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Purchase and inquiry

Manufacturer Product Number:

IFCB0402ER1N5S

Series:

IFCB-0402

Type:

Thin Film

Inductance:

1.5 nH

Current Rating (Amps):

700 mA

Shielding:

Unshielded

Q @ Freq:

7 @ 100MHz

Ratings:

-

Inductance Frequency - Test:

500 MHz

Package / Case:

0402 (1005 Metric)

Size / Dimension:

0.039" L x 0.020" W (1.00mm x 0.50mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

-

Tolerance:

±0.3nH

Current - Saturation (Isat):

-

DC Resistance (DCR):

250mOhm Max

Frequency - Self Resonant:

10GHz

Operating Temperature:

-40°C ~ 85°C

Mounting Type:

Surface Mount

Supplier Device Package:

0402 (1005 Metric)

Height - Seated (Max):

0.015" (0.37mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8504.50.4000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

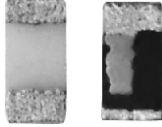
EAR99

IFCB-0402

Vishay Dale



Thin Film Chip Inductors

RoHS
COMPLIANT

FEATURES

- Tight tolerance
- Self-resonant frequency controlled within 10 %
- Stable inductance over high frequencies
- Compatible with reflow or flow soldering
- Temperature range: - 40 °C to + 125 °C (no load)
- 40 °C to + 85 °C (full rated current)
- Compliant to RoHS directive 2002/95/EC

APPLICATIONS

- Cellular telephone, pagers and GPS products
- Wireless LAN and other communication appliances
- VCO, TCXO circuit and RF transceiver module

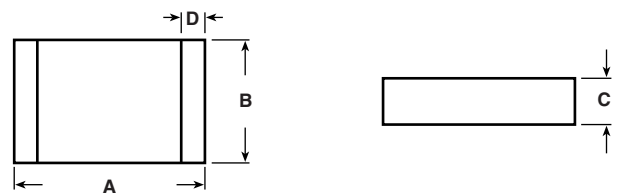
STANDARD ELECTRICAL SPECIFICATIONS

L 500 MHz (nH)	L TOL.	Q TYPICAL			SRF TYP. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)
		100 MHz	800 MHz	1700 MHz			
1.0	0.3 nH	7	21	33	12 000	0.15	700
1.2	0.3 nH	7	21	33	12 000	0.15	700
1.5	0.3 nH	7	21	33	10 000	0.25	700
1.8	0.3 nH	7	21	33	10 000	0.25	560
2.2	0.3 nH	7	21	33	8000	0.35	440
2.7	0.3 nH	7	21	33	8000	0.35	440
3.3	0.3 nH	7	21	28	6000	0.45	380
3.9	0.3 nH	7	21	28	6000	0.55	340
4.7	0.3 nH	7	21	28	6000	0.65	320
5.6	0.3 nH	7	21	28	6000	0.85	280
6.8	0.3 nH	7	21	28	6000	1.05	260
8.2	0.3 nH	7	21	28	5500	1.25	220
10	2 %, 5 %	7	21	26	4500	1.35	200
12	2 %, 5 %	5	21	26	3700	1.55	180
15	2 %, 5 %	5	21	26	3300	1.75	130
18	2 %, 5 %	5	21	21	3100	2.15	100
22	2 %, 5 %	5	21	19	2800	2.65	90

Note

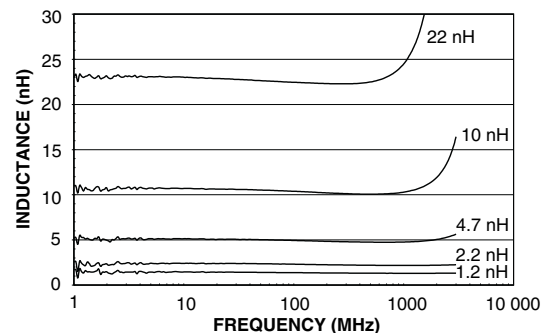
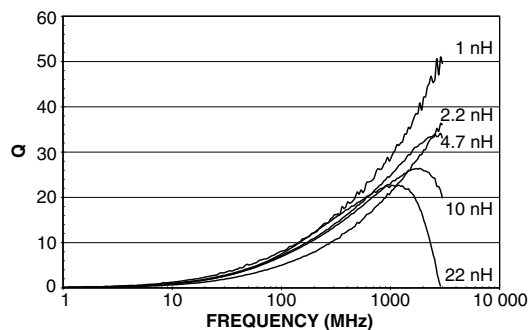
- Test equipment: HP-4287 and Agilent 16196B

DIMENSIONS in inches [millimeters]



MODEL	A	B	C	D
IFCB-0402	0.039±0.002 [1.00 ± 0.05]	0.020±0.002 [0.50 ± 0.05]	0.013±0.002 [0.32 ± 0.05]	0.008±0.004 [0.20 ± 0.10]

PERFORMANCE GRAPHS: INDUCTANCE AND Q VS. FREQUENCY



DESCRIPTION

IFCB-0402	10 nH	± 5 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	F	C	B	0	4	0	2	E	R	1	0	N	J
PRODUCT FAMILY				SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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