

ISC1210BN2R7K Datasheet



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DiGi Electronics Part Number	ISC1210BN2R7K-DG
Manufacturer	Vishay Dale
Manufacturer Product Number	ISC1210BN2R7K
Description	FIXED IND 2.7UH 290MA 1 OHM SMD
Detailed Description	2.7 μ H Shielded Drum Core, Wirewound Inductor 290 mA 10hm Max 1210 (3225 Metric)



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Purchase and inquiry

Manufacturer Product Number:

ISC1210BN2R7K

Series:

ISC-1210

Type:

Drum Core, Wirewound

Inductance:

2.7 μ H

Current Rating (Amps):

290 mA

Shielding:

Shielded

Q @ Freq:

30 @ 7.96MHz

Ratings:

-

Inductance Frequency - Test:

7.96 MHz

Package / Case:

1210 (3225 Metric)

Size / Dimension:

0.126" L x 0.098" W (3.20mm x 2.49mm)

Manufacturer:

Vishay Dale

Product Status:

Active

Material - Core:

Iron Powder

Tolerance:

\pm 10%

Current - Saturation (Isat):

-

DC Resistance (DCR):

10hm Max

Frequency - Self Resonant:

60MHz

Operating Temperature:

-55°C ~ 125°C

Mounting Type:

Surface Mount

Supplier Device Package:

1210

Height - Seated (Max):

0.095" (2.41mm)

Environmental & Export classification

RoHS Status:

RoHS non-compliant

REACH Status:

REACH Affected

HTSUS:

8504.50.8000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99



Wirewound, Surface-Mount, Molded, Shielded Inductors



RoHS
COMPLIANT
HALOGEN
FREE

STANDARD ELECTRICAL SPECIFICATIONS

IND. (μ H)	TOL.	TEST FREQ.	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) ⁽¹⁾
		L & Q				
0.010	$\pm 20\%$	50	50	1000	0.10	810
0.012	$\pm 20\%$	50	50	1000	0.11	750
0.015	$\pm 20\%$	50	50	1000	0.12	720
0.018	$\pm 20\%$	50	50	1000	0.13	690
0.022	$\pm 20\%$	50	45	1000	0.15	640
0.027	$\pm 20\%$	50	45	1000	0.17	610
0.033	$\pm 20\%$	50	45	1000	0.18	585
0.039	$\pm 20\%$	50	40	1000	0.24	530
0.047	$\pm 20\%$	50	40	1000	0.26	495
0.056	$\pm 20\%$	50	40	1000	0.28	485
0.068	$\pm 20\%$	50	40	1000	0.35	475
0.082	$\pm 20\%$	50	38	900	0.45	460
0.10	$\pm 20\%$	50	36	700	0.50	450
0.12	$\pm 20\%$	25.2	40	500	0.20	630
0.15	$\pm 20\%$	25.2	40	470	0.20	600
0.18	$\pm 20\%$	25.2	40	400	0.24	580
0.22	$\pm 20\%$	25.2	40	330	0.30	565
0.27	$\pm 20\%$	25.2	40	310	0.33	500
0.33	$\pm 20\%$	25.2	40	280	0.36	475
0.39	$\pm 20\%$	25.2	40	230	0.40	465
0.47	$\pm 20\%$	25.2	40	220	0.44	460
0.56	$\pm 20\%$	25.2	40	200	0.46	455
0.68	$\pm 20\%$	25.2	40	180	0.48	450
0.82	$\pm 20\%$	25.2	40	160	0.50	450
1.0	$\pm 10\%$	7.96	30	120	0.60	400
1.2	$\pm 10\%$	7.96	30	110	0.65	390
1.5	$\pm 10\%$	7.96	30	90.0	0.75	370
1.8	$\pm 10\%$	7.96	30	85.0	0.85	350
2.2	$\pm 10\%$	7.96	30	65.0	0.90	320
2.7	$\pm 10\%$	7.96	30	60.0	1.00	290
3.3	$\pm 10\%$	7.96	30	60.0	1.10	270
3.9	$\pm 10\%$	7.96	30	58.0	1.20	250
4.7	$\pm 10\%$	7.96	30	52.0	1.25	220
5.6	$\pm 10\%$	7.96	30	50.0	1.40	210
6.8	$\pm 10\%$	7.96	30	40.0	1.60	205
8.2	$\pm 10\%$	7.96	30	35.0	1.65	195
10.0	$\pm 10\%$	2.52	30	30.0	2.00	185
12.0	$\pm 10\%$	2.52	30	24.0	2.30	175
15.0	$\pm 10\%$	2.52	30	20.0	2.50	165
18.0	$\pm 10\%$	2.52	30	17.0	2.70	155
22.0	$\pm 10\%$	2.52	30	16.0	3.10	150
27.0	$\pm 10\%$	2.52	30	14.5	3.30	125
33.0	$\pm 10\%$	2.52	30	14.5	5.10	115
39.0	$\pm 10\%$	2.52	30	14.0	5.90	105
47.0	$\pm 10\%$	2.52	30	13.0	8.00	100
56.0	$\pm 10\%$	2.52	30	11.5	10.0	95
68.0	$\pm 10\%$	2.52	30	11.0	10.0	90
82.0	$\pm 10\%$	2.52	30	11.0	11.0	85
100.0	$\pm 10\%$	0.796	30	6.0	12.0	80

Note

⁽¹⁾ Rated DC current based on the maximum temperature rise, not to exceed 40 °C at +85 °C ambient

FEATURES

- Molded construction provides superior strength and moisture resistance
- Tape and reel packaging for automatic handling, 2000/reel, EIA-481
- Compatible with vapor phase, infrared, and wave soldering methods
- Shielded construction minimizes coupling to other components
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

ELECTRICAL SPECIFICATIONS

Inductance range: 0.01 μ H to 100 μ H

Special tolerances available upon request

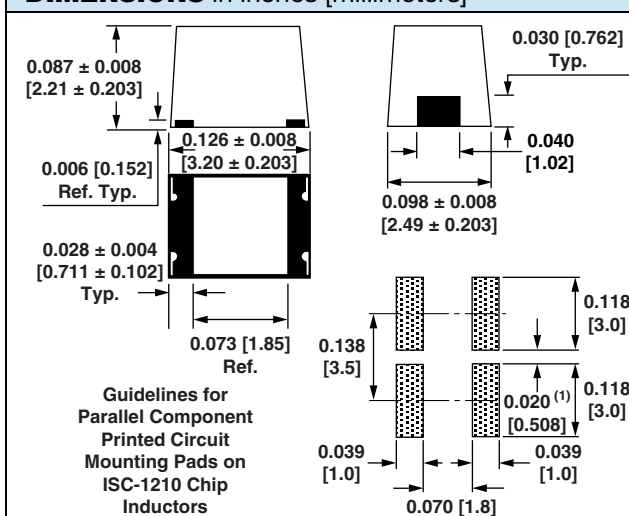
Operating temperature: -55 °C to +125 °C

Coilform material: non-magnetic for 0.01 μ H to 0.10 μ H;; powdered iron for 0.12 μ H to 100 μ H

TEST EQUIPMENT

- H/P 4342A Q meter with Vishay Dale test fixture or equivalent
- H/P 4191A RF impedance analyzer (for SRF measurements)
- Wheatstone bridge

DIMENSIONS in inches [millimeters]



Note

⁽¹⁾ Recommended minimum spacing between components

PART MARKING

- Vishay Dale
- Inductance code
- Date code

DESCRIPTION

ISC-1210	10 μ H	$\pm 10\%$	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

I	S	C	1	2	1	0	E	R	1	0	0	K
PRODUCT FAMILY			SIZE				PACKAGE CODE		INDUCTANCE VALUE			TOL.



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