THE DATASHEET OF

IMC1210ER470K

Wirewound, Surface Mount Molded Inductors

STANDARD ELECTRICAL SPECIFICATIONS

IND. (µH)	TOL.	TEST FREQ. (MHz) L & Q	Q MIN.	SRF MIN. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA) (1)
0.010	20 %	50	30	1000	0.13	734
0.012	20 %	50	30	1000	0.14	707
0.015	20 %	50	30	1000	0.16	661
0.018	20 %	50	30	1000	0.18	624
0.022	20 %	50	30	1000	0.20	592
0.027	20 %	50	30	1000	0.22	564
0.033	20 %	50	30	1000	0.24	540
0.039	20 %	50	30	1000	0.27	530
0.047	20 %	50	30	1000	0.30	483
0.056	20 %	50	30	1000	0.33	470
0.068	20 %	50	30	1000	0.36	450
0.082	20 %	50	30	900	0.40	450
0.10	20 %	50	30	700	0.44	450
0.12	20 %	25.2	30	500	0.22	584
0.15	20 %	25.2	30	450	0.25	548
0.18	20 %	25.2	30	400	0.28	518
0.22	20 %	25.2	30	350	0.32	484
0.27	20 %	25.2	30	320	0.36	456
0.33	20 %	25.2	30	300	0.40	453
0.39	20 %	25.2	30	250	0.45	450
0.47	20 %	25.2	30	220	0.50	450
0.56	20 %	25.2	30	180	0.55	450
0.68	20 %	25.2	30	160	0.60	450
0.82	20 %	25.2	30	140	0.67	450
1.0	10 %	7.96	30	120	0.70	400
1.2	10 %	7.96	30	100	0.75	390
1.5	10 %	7.96	30	85	0.85	370
1.8	10 %	7.96	30	80	0.90	350
2.2	10 %	7.96	30	75	1.0	320
2.7	10 %	7.96	30	70	1.1	290
3.3	10 %	7.96	30	60	1.2	260
3.9	10 %	7.96	30	55	1.3	250
4.7	10 %	7.96	30	50	1.5	224
5.6	10 %	7.96	30	45	1.6	217
6.8	10 %	7.96	30	40	1.8	204
8.2	10 %	7.96	30	38	2.0	194
10	10 %	2.52	30	33	2.1	189
12	10 %	2.52	30	30	2.5	173
15	10 %	2.52	30	21	2.8	164
18	10 %	2.52	30	20	3.3	151
22	10 %	2.52	30	19	3.7	145
27	10 %	2.52	30	18	5.0	122
33	10 %	2.52	30	16	6.0	112
39	10 %	2.52	30	15	7.0	104
47	10 %	2.52	30	14	9.0	91
56	10 %	2.52	30	12	10.0	87
68	10 %	2.52	30	11	11.0	83
82	10 %	2.52	30	10	12.0	79
100	10 %	0.796	20	9	14.0	73
120	10 %	0.796	15	8	11.0	70
150	10 %	0.796	15	6.5	15.0	65
180	10 %	0.796	15	6	17.0	60
220	10 %	0.796	15	6	21.0	50

Note

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

FEATURES

- Printed marking
- Molded construction provides superior strength and moisture resistance
- Compatible with vapor phase and infrared reflow soldering
- Tape and reel packaging for automatic handling, 2000/reel, EIA-481
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free
RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance range: 0.01 µH to 220 µH

Special tolerances available upon request

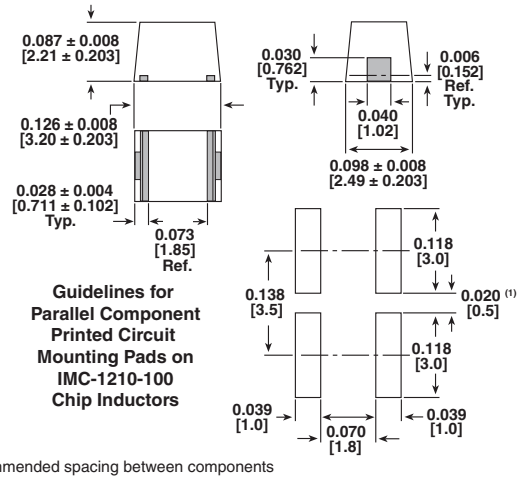
Operating temperature: -55 °C to +125 °C

Coilform material: Non-magnetic from 0.01 µH to 0.10 µH
Powdered iron from 0.12 µH to 100 µH
Ferrite from 120 µH to 220 µH

TEST EQUIPMENT

- HP4342A Q meter with Vishay Dale test fixture or equivalent
- HP4191A RF impedance analyzer (for SRF measurements)
- Wheatstone brigde

DIMENSIONS in inches [millimeters]



Guidelines for Parallel Component Printed Circuit Mounting Pads on IMC-1210-100 Chip Inductors

Note

(1) Recommended spacing between components

PART MARKING

- Vishay Dale
- Inductance value
- Date code

DESCRIPTION

IMC-1210	10 µH	± 10 %	ER	e3
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC® LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

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

For technical questions, contact: magnetics@vishay.com

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