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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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Inductors

Epoxy Conformal Coated
Uniform Roll Coated

FEATURES

- Flame-retardant coating
- Color band identification
- Excellent environmental characteristics
- Uniform coating is excellent for automatic insertion
- Comparable in quality to molded chokes at a lower price
- Epoxy coating is more durable than lacquer coated models, yet is priced comparably

Pb-free
RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 1 %, ± 3 %, ± 5 %, ± 10 %, ± 20 %
Other tolerances available on request

Insulation Resistance: 1000 Megohm minimum per MIL-STD-202, Method 302, Test Condition B

Dielectric Strength: 1000 VAC per MIL-STD-202, Method 301

MATERIAL SPECIFICATIONS

Coating: Epoxy-uniform roll coated

Lead: Tinned copper

MECHANICAL SPECIFICATIONS

Terminal Strenght: 5 pounds pull per MIL-STD-202, Method 211, Test Condition A

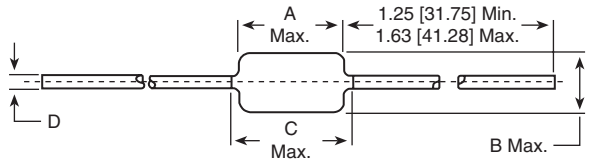
Weight: IR-2 = 0.30 grams maximum
IR-4 = 0.65 gram maximum

TEST EQUIPMENT*

- H/P 4342A Q-Meter
- Measurements Corporation Megacycle Meter, Model 59
- Whearstone bridge

* Test procedures per MIL-PRF-15305

DIMENSIONS in inches [millimeters]



MODEL	A (Max.)	B (Max.)	C (Max.)	D
IR-2	0.260 [6.60]	0.120 [3.05]	0.330 [8.38]	0.0200 ± 0.0015 [0.508 ± 0.038]
IR-4	0.385 [9.78]	0.180 [4.57]	0.440 [11.18]	0.025 ± 0.002 [0.635 ± 0.051]

ENVIRONMENTAL PERFORMANCE

TEST	CONDITIONS	SPECIFICATIONS
Barometric Pressure	Test Condition C	MIL-STD-202, Method 105
Thermal Shock	Test Condition A-1	MIL-STD-202, Method 107
Flammability	-	MIL-STD-202, Method 111
Overload	-	MIL-PRF-15305
Low Temperature	-	MIL-PRF-15305
Resistance to Soldering Heat	Test Condition A	MIL-STD-202, Method 210
Resistance to Solvents	-	MIL-STD-202, Method 215

MAXIMUM TEMPERATURE RISE

		OPERATING TEMPERATURE RANGE
IR-2		
	0.1 µH to 1.0 µH = + 35 °C at + 90 °C ambient	- 55 °C to 125 °C
	1.2 µH to 27 µH = + 15 °C at + 90 °C ambient	- 55 °C to 105 °C
	33 µH to 1000 µH = + 15 °C at + 90 °C ambient	- 55 °C to 105 °C
IR-4		
	0.15 µH to 4.7 µH = + 35 °C at + 90 °C ambient	- 55 °C to 125 °C
	5.6 µH to 33 µH = + 15 °C at + 90 °C ambient	- 55 °C to 105 °C
	36 µH to 240 µH = + 15 °C at + 90 °C ambient	- 55 °C to 105 °C
	270 µH to 1800 µH = + 35 °C at + 90 °C ambient	- 55 °C to 125 °C

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (µH)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT* FREQ MIN. (MHz)	DCR MAX. (Ohms)	RATED DC** CURRENT (mA)	
IR-2	0.10	± 10 %	40	25.0	680.0	0.08	1350	PHENOLIC CORE
IR-2	0.12	± 10 %	40	25.0	640.0	0.09	1270	
IR-2	0.15	± 10 %	38	25.0	600.0	0.10	1200	
IR-2	0.18	± 10 %	35	25.0	550.0	0.12	1105	
IR-2	0.22	± 10 %	33	25.0	510.0	0.14	1025	
IR-2	0.27	± 10 %	33	25.0	430.0	0.16	960	
IR-2	0.33	± 10 %	30	25.0	410.0	0.22	815	
IR-2	0.39	± 10 %	30	25.0	365.0	0.30	700	
IR-2	0.47	± 10 %	30	25.0	330.0	0.35	650	
IR-2	0.56	± 10 %	30	25.0	300.0	0.50	545	
IR-2	0.68	± 10 %	28	25.0	275.0	0.60	495	
IR-2	0.82	± 10 %	28	25.0	250.0	0.85	415	
IR-2	1.0	± 10 %	25	25.0	230.0	1.00	385	
IR-2	1.2	± 10 %	25	7.9	150.0	0.18	590	IRON CORE
IR-2	1.5	± 10 %	28	7.9	140.0	0.22	535	
IR-2	1.8	± 10 %	30	7.9	125.0	0.30	455	
IR-2	2.2	± 10 %	30	7.9	115.0	0.40	395	
IR-2	2.7	± 10 %	37	7.9	100.0	0.55	355	
IR-2	3.3	± 10 %	45	7.9	90.0	0.85	270	
IR-2	3.9	± 10 %	45	7.9	80.0	1.0	250	
IR-2	4.7	± 10 %	45	7.9	75.0	1.2	230	
IR-2	5.6	± 10 %	50	7.9	65.0	1.8	185	
IR-2	6.8	± 10 %	50	7.9	60.0	2.0	175	
IR-2	8.2	± 10 %	55	7.9	55.0	2.7	155	
IR-2	10.0	± 10 %	55	7.9	50.0	3.7	130	
IR-2	12.0	± 10 %	45	2.5	40.0	2.7	155	
IR-2	15.0	± 10 %	40	2.5	35.0	2.8	150	
IR-2	18.0	± 10 %	50	2.5	30.0	3.1	145	
IR-2	22.0	± 10 %	50	2.5	25.0	3.3	140	
IR-2	27.0	± 10 %	50	2.5	20.0	3.5	135	
IR-2	33.0	± 10 %	45	2.5	24.0	3.4	130	FERRITE CORE
IR-2	39.0	± 10 %	45	2.5	22.0	3.6	125	
IR-2	47.0	± 10 %	45	2.5	20.0	4.5	110	
IR-2	56.0	± 10 %	45	2.5	18.0	5.7	100	
IR-2	68.0	± 10 %	50	2.5	15.0	6.7	92	
IR-2	82.0	± 10 %	50	2.5	14.0	7.3	88	
IR-2	100.0	± 10 %	50	2.5	13.0	8.0	84	
IR-2	120.0	± 10 %	30	0.79	12.0	13.0	66	
IR-2	150.0	± 10 %	30	0.79	11.0	15.0	61	
IR-2	180.0	± 10 %	30	0.79	10.0	17.0	57	
IR-2	220.0	± 10 %	30	0.79	9.0	21.0	52	
IR-2	270.0	± 10 %	30	0.79	8.0	25.0	47	
IR-2	330.0	± 10 %	30	0.79	7.0	28.0	45	
IR-2	390.0	± 10 %	30	0.79	6.5	35.0	40	
IR-2	470.0	± 10 %	30	0.79	6.0	42.0	36	
IR-2	560.0	± 10 %	30	0.79	5.0	46.0	35	
IR-2	680.0	± 10 %	30	0.79	4.0	60.0	30	
IR-2	820.0	± 10 %	30	0.79	3.8	65.0	29	
IR-2	1000.0	± 10 %	30	0.79	3.4	72.0	28	
IR-4	0.15	± 20 %	50	25.0	525.0	0.03	2450	PHENOLIC CORE
IR-4	0.22	± 20 %	50	25.0	450.0	0.055	1810	
IR-4	0.33	± 20 %	45	25.0	360.0	0.09	1400	
IR-4	0.47	± 20 %	45	25.0	310.0	0.12	1225	
IR-4	0.56	± 10 %	50	25.0	280.0	0.135	1150	
IR-4	0.68	± 10 %	50	25.0	250.0	0.15	1100	
IR-4	0.82	± 10 %	50	25.0	220.0	0.22	900	
IR-4	1.0	± 10 %	50	25.0	200.0	0.29	785	
IR-4	1.2	± 10 %	33	7.9	180.0	0.42	650	
IR-4	1.5	± 10 %	33	7.9	160.0	0.50	600	
IR-4	1.8	± 10 %	33	7.9	150.0	0.65	525	
IR-4	2.2	± 10 %	33	7.9	135.0	0.95	435	
IR-4	2.7	± 10 %	33	7.9	120.0	1.20	385	
IR-4	3.3	± 10 %	33	7.9	110.0	2.00	300	
IR-4	3.9	± 10 %	33	7.9	100.0	2.30	280	
IR-4	4.7	± 10 %	33	7.9	90.0	2.60	260	

* Measured with full length lead.

** Rated DC Current based on maximum temperature rise as shown in table.

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (µH)	TOL.	Q MIN.	TEST FREQ. L & Q (MHz)	SELF-RESONANT* FREQ MIN. (MHz)	DCR MAX. (Ohms)	RATED DC** CURRENT (mA)	
IR-4	5.6	± 10 %	45	7.9	60.0	32.0	495	IRON CORE
IR-4	6.8	± 10 %	50	7.9	55.0	0.50	395	
IR-4	8.2	± 10 %	50	7.9	50.0	0.60	360	
IR-4	10.0	± 10 %	55	7.9	45.0	0.90	290	
IR-4	12.0	± 10 %	65	2.5	42.0	1.10	265	
IR-4	15.0	± 10 %	65	2.5	40.0	1.40	240	
IR-4	18.0	± 10 %	75	2.5	34.0	2.25	185	
IR-4	22.0	± 10 %	75	2.5	30.0	2.50	175	
IR-4	27.0	± 10 %	60	2.5	25.0	2.60	170	
IR-4	33.0	± 10 %	65	2.5	19.0	3.0	165	
IR-4	36.0	± 5 %	60	2.5	15.5	2.50	180	
IR-4	39.0	± 5 %	60	2.5	14.5	2.60	176	
IR-4	43.0	± 5 %	60	2.5	13.7	2.70	172	
IR-4	47.0	± 5 %	55	2.5	13.0	2.75	170	
IR-4	51.0	± 5 %	55	2.5	12.7	2.85	167	
IR-4	56.0	± 5 %	55	2.5	12.0	3.0	164	
IR-4	62.0	± 5 %	55	2.5	11.5	3.15	160	
IR-4	68.0	± 5 %	55	2.5	11.0	3.30	156	
IR-4	75.0	± 5 %	55	2.5	10.5	3.70	147	
IR-4	82.0	± 5 %	50	2.5	10.3	3.90	143	
IR-4	91.0	± 5 %	50	2.5	10.0	4.30	136	
IR-4	100.0	± 5 %	50	2.5	9.5	4.50	133	
IR-4	110.0	± 5 %	60	0.79	8.9	4.90	128	
IR-4	120.0	± 5 %	65	0.79	8.7	5.20	124	
IR-4	130.0	± 5 %	65	0.79	8.5	5.45	121	
IR-4	150.0	± 5 %	65	0.79	8.0	6.05	114	
IR-4	160.0	± 5 %	65	0.79	7.5	6.40	111	
IR-4	180.0	± 5 %	65	0.79	7.0	6.75	108	
IR-4	200.0	± 5 %	65	0.79	6.5	7.10	106	
IR-4	220.0	± 5 %	65	0.79	6.2	7.45	103	
IR-4	240.0	± 5 %	65	0.79	5.9	7.80	101	
IR-4	270.0	± 5 %	65	0.79	5.7	11.0	129	
IR-4	300.0	± 5 %	65	0.79	5.4	11.5	125	
IR-4	330.0	± 5 %	65	0.79	5.1	12.0	123	
IR-4	360.0	± 5 %	65	0.79	4.8	15.5	108	
IR-4	390.0	± 5 %	65	0.79	4.5	16.3	105	
IR-4	430.0	± 5 %	65	0.79	4.2	17.1	102	
IR-4	470.0	± 5 %	65	0.79	3.9	17.9	100	
IR-4	510.0	± 5 %	65	0.79	3.7	18.8	98	
IR-4	560.0	± 5 %	65	0.79	3.5	24.7	85	
IR-4	620.0	± 5 %	65	0.79	3.3	25.9	83	
IR-4	680.0	± 5 %	55	0.79	3.1	27.2	81	
IR-4	750.0	± 5 %	55	0.79	2.9	28.6	79	
IR-4	820.0	± 5 %	55	0.79	2.7	30.0	77	
IR-4	910.0	± 5 %	55	0.79	2.5	31.5	76	
IR-4	1000.0	± 5 %	55	0.79	2.3	33.1	74	
IR-4	1100.0	± 5 %	30	0.25	2.1	43.5	64	
IR-4	1200.0	± 5 %	30	0.25	2.0	45.7	63	
IR-4	1300.0	± 5 %	30	0.25	1.9	49.0	61	
IR-4	1500.0	± 5 %	30	0.25	1.8	52.5	59	
IR-4	1600.0	± 5 %	30	0.25	1.7	54.0	58	
IR-4	1800.0	± 5 %	30	0.25	1.6	56.7	56	

* Measured with full length lead.
** Rated DC Current based on maximum temperature rise as shown in table.

DESCRIPTION

IR-2	10 µH	± 10 %	ER	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER INFORMATION

I	R	0	2	E	R	1	0	0	K
MODEL				PACKING CODE		INDUCTANCE VALUE			TOL.

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