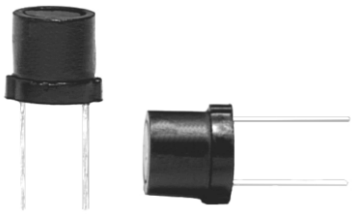
Inductors, Subminiature, Shielded, Radial Leaded



FEATURES

- Classification is grade 1, class B
- Subminiature shielded
- Inductance range is 0.10 µH to 100 000 µH
- Printed board mounting facilitated by 0.200" [5.08 mm] grid spacing
- Radial lead fixed inductor
- High Q values
- Unitized epoxy-molded construction
- Shielded construction to allow maximum density packaging
- Compliant to RoHS directive 2002/95/EC

RoHS COMPLIANT

ELECTRICAL SPECIFICATIONS

Inductance Tolerance: ± 10 %

Dielectric Strength: 840 V_{RMS} at sea level

Working Voltage: 300 V_{DC}

Q and SRF Values: Minimum not less than 80 % of specified value

Maximum Current: Based on temperature rise not to exceed 35 °C at + 90 °C ambient

MECHANICAL SPECIFICATIONS

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

Terminal Pull: 3 pounds

DENSITY SPECIFICATIONS

Weight: 1.5 grams maximum

Shielding: 3 % coupling maximum when two units are tested side by side

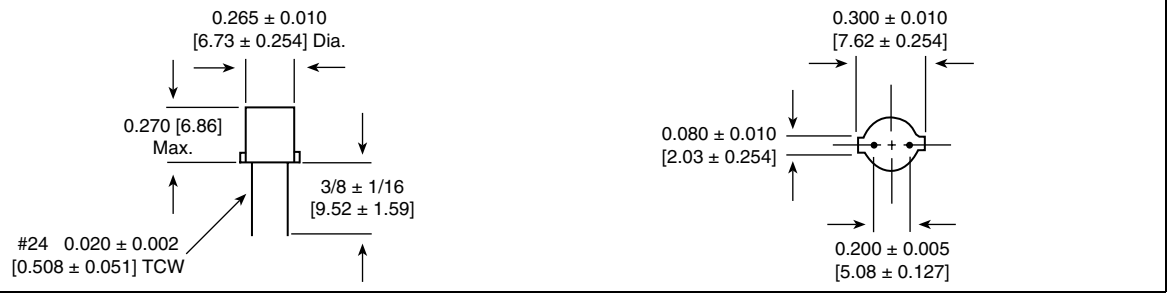
ENVIRONMENTAL SPECIFICATIONS

Moisture: Per MIL-STD-202, method 106

Vibration: Low frequency, 10 Hz to 55 Hz at 0.06" [1.52 mm] maximum total excursion at rate of 1 linear sweep per minute for 2 h repeated for each of three mutually perpendicular planes

Shock: 100 *g*, 6 ms, body mounted

DIMENSIONS in inches [millimeters]



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (µH)	TOL. (%)	Q NOM.	TEST FREQ. (MHz)	SRF NOM. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA) (1)
PC	0.10	± 10	70	25	> 250	0.030	2500	2500
PC	0.12	± 10	70	25	> 250	0.030	2500	2500
PC	0.15	± 10	70	25	> 250	0.030	2500	2500
PC	0.18	± 10	70	25	> 250	0.035	2400	2400
PC	0.22	± 10	70	25	> 250	0.038	2300	2300
PC	0.27	± 10	80	25	> 250	0.040	2200	2200
PC	0.33	± 10	80	25	> 250	0.040	2200	2200
PC	0.39	± 10	80	25	250	0.045	2100	2100
PC	0.47	± 10	80	25	230	0.045	2100	2100
PC	0.56	± 10	80	25	220	0.050	2000	2000

Note

(1) **Incremental Current:** The DC current required to cause a 5 % reduction in the nominal inductance value.

STANDARD ELECTRICAL SPECIFICATIONS

MODEL	IND. (µH)	TOL. (%)	Q NOM.	TEST FREQ. (MHz)	SRF NOM. (MHz)	DCR MAX. (Ω)	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA) [1]
PC	0.68	± 10	80	25	190	0.055	1900	1900
PC	0.82	± 10	85	25	180	0.060	1800	1800
PC	1.0	± 10	85	25	160	0.070	1700	1700
PC	1.2	± 10	90	7.9	170	0.085	1670	1670
PC	1.5	± 10	100	7.9	155	0.100	1540	1540
PC	1.8	± 10	115	7.9	135	0.110	1470	1470
PC	2.2	± 10	110	7.9	120	0.120	1410	1410
PC	2.7	± 10	110	7.9	104	0.125	1380	1380
PC	3.3	± 10	90	7.9	93	0.165	1200	1200
PC	3.9	± 10	90	7.9	87	0.180	1135	1135
PC	4.7	± 10	95	7.9	79	0.245	985	985
PC	5.6	± 10	95	7.9	72	0.265	950	950
PC	6.8	± 10	85	7.9	63	0.330	853	853
PC	8.2	± 10	95	7.9	60	0.460	720	720
PC	10	± 10	90	7.9	54	0.640	620	620
PC	12	± 10	120	2.5	37	0.800	545	545
PC	15	± 10	120	2.5	28.8	0.865	520	520
PC	18	± 10	115	2.5	23.8	0.940	504	504
PC	22	± 10	125	2.5	21.3	1.03	460	460
PC	27	± 10	115	2.5	20.6	1.18	418	418
PC	33	± 10	120	2.5	18.6	1.30	398	398
PC	39	± 10	120	2.5	17.7	1.41	385	385
PC	47	± 10	110	2.5	14.9	1.61	350	350
PC	56	± 10	115	2.5	13.9	2.08	330	333
PC	68	± 10	105	2.5	12.9	2.20	320	330
PC	82	± 10	105	2.5	11.7	2.42	300	320
PC	100	± 10	95	2.5	10.5	2.15	333	300
PC	120	± 10	95	0.79	5.6	2.38	316	190
PC	150	± 10	90	0.79	5.2	2.52	306	175
PC	180	± 10	95	0.79	4.9	2.88	288	150
PC	220	± 10	95	0.79	4.6	3.18	273	125
PC	270	± 10	100	0.79	4.2	3.50	260	120
PC	330	± 10	100	0.79	3.55	4.80	222	110
PC	390	± 10	100	0.79	3.45	5.44	209	105
PC	470	± 10	100	0.79	3.2	5.9	201	100
PC	560	± 10	95	0.79	2.9	6.3	194	90
PC	680	± 10	100	0.79	2.7	7.2	181	80
PC	820	± 10	90	0.79	2.5	8.0	172	70
PC	1000	± 10	100	0.79	2.35	12	141	65

Note

[1] **Incremental Current:** The DC current required to cause a 5 % reduction in the nominal inductance value.

MARKING

- Manufacturer data printed

ORDERING INFORMATION

PC	0.10 µH	10 %	EB	e2
MODEL	INDUCTANCE VALUE	INDUCTANCE TOLERANCE	PACKAGE CODE	JEDEC LEAD (Pb)-FREE STANDARD

GLOBAL PART NUMBER

P	C	9	E	B	R	1	0	K
MODEL			PACKAGE CODE		INDUCTANCE VALUE			INDUCTANCE TOLERANCE

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