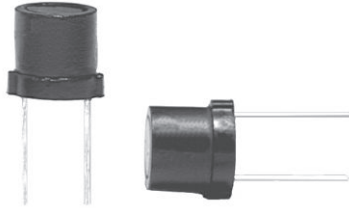


## Inductors, Subminiature, Shielded, Radial Leaded


**RoHS**  
COMPLIANT

### FEATURES

- Classification is grade 1, class B
- Subminiature shielded
- Custom values up to 100 000  $\mu\text{H}$  are available upon request
- 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
- Material categorization: For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)

### ELECTRICAL SPECIFICATIONS

**Inductance Tolerance:**  $\pm 10\%$ 
**Dielectric Strength:** 840  $V_{\text{RMS}}$  at sea level

**Working Voltage:** 300  $V_{\text{DC}}$ 
**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 g maximum

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

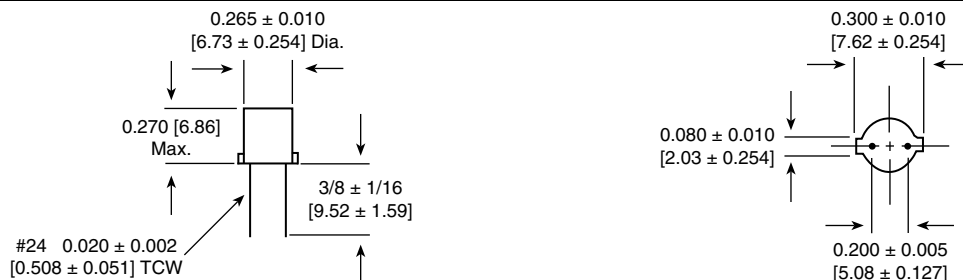
### ENVIRONMENTAL SPECIFICATIONS

**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. ( $\mu\text{H}$ )	TOL. (%)	Q NOM.	TEST FREQ. (MHz)	SRF NOM. (MHz)	DCR MAX. ( $\Omega$ )	RATED DC CURRENT (mA)	INCREMENTAL CURRENT (mA) <sup>(1)</sup>
PC	0.10	$\pm 10$	70	25	> 250	0.030	2500	2500
PC	0.12	$\pm 10$	70	25	> 250	0.030	2500	2500
PC	0.15	$\pm 10$	70	25	> 250	0.030	2500	2500
PC	0.18	$\pm 10$	70	25	> 250	0.035	2400	2400
PC	0.22	$\pm 10$	70	25	> 250	0.038	2300	2300
PC	0.27	$\pm 10$	80	25	> 250	0.040	2200	2200
PC	0.33	$\pm 10$	80	25	> 250	0.040	2200	2200
PC	0.39	$\pm 10$	80	25	250	0.045	2100	2100
PC	0.47	$\pm 10$	80	25	230	0.045	2100	2100

**Note**
<sup>(1)</sup> 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) <sup>(1)</sup>
PC	0.56	± 10	80	25	220	0.050	2000	2000
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**

<sup>(1)</sup> 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
MODEL			R 1 0
			K
			INDUCTANCE TOLERANCE



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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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