

# MODEL BCL 565050

2220 Industry Size

Surface Mount Inductors



## FEATURES

- Wound ferrite core for low DCR
- Molded construction provides superior strength and moisture resistance
- Accurate dimensions for automatic handling and machine placement
- Compatible with vapor phase and infrared reflow soldering
- Wide inductance range in a small package

## APPLICATIONS

- Instrumentation
- Mobile communication equipment
- Notebook computer
- Video and audio equipment
- Video games
- Medical equipment

## ELECTRICAL / ENVIRONMENTAL

Inductance Range	1 $\mu$ H to 10,000 $\mu$ H
Standard Tolerance	$\pm 10\%$ (>1,000 $\mu$ H = $\pm 5\%$ )
Operating Temperature Range	-40°C to +100°C
Storage Temperature Range	-40°C to +100°C
Ambient Temperature, Maximum	80°C
Resistance to Solder Heat	260°C for 10 sec.
Terminal Pull Strength, Minimum	0.5 kg

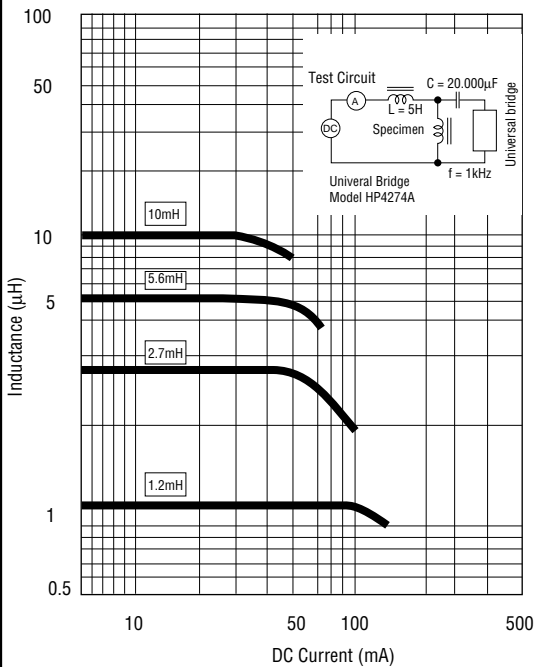
Specifications subject to change without notice.  
Last Update: 04/24/2003.

**SPECIFICATIONS**

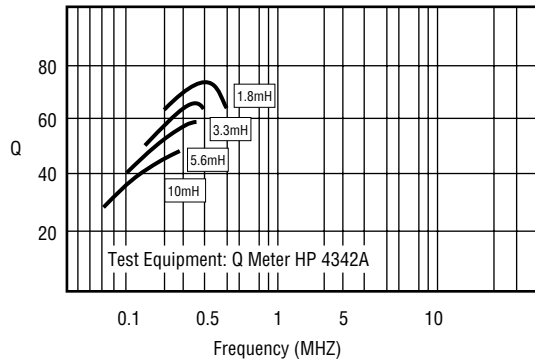
Part Number	Inductance $\mu\text{H}$	Q Min.	Test		DC	Rated Current IDC mA
			Frequency MHz	SRF MHz Min.	Resistance $\Omega$ Max.	
BCL565050-1R0K	1.00±10%	10	7.96	95	0.030	1800
BCL565050-1R2K	1.20±10%	10	7.96	70	0.035	1700
BCL565050-1R5K	1.50±10%	10	7.96	55	0.04	1600
BCL565050-1R8K	1.80±10%	10	7.96	47	0.05	1400
BCL565050-2R2K	2.20±10%	10	7.96	42	0.06	1300
BCL565050-2R7K	2.70±10%	10	7.96	37	0.07	1200
BCL565050-3R3K	3.30±10%	10	7.96	34	0.08	1120
BCL565050-3R9K	3.90±10%	10	7.96	32	0.09	1050
BCL565050-4R7K	4.70±10%	10	7.96	29	0.11	950
BCL565050-5R6K	5.60±10%	10	7.96	26	0.13	880
BCL565050-6R8K	6.80±10%	10	7.96	24	0.15	810
BCL565050-8R2K	8.20±10%	10	7.96	22	0.18	750
BCL565050-100K	10.00±10%	10	2.52	19	0.21	690
BCL565050-120K	12.00±10%	10	2.52	17	0.25	630
BCL565050-150K	15.00±10%	10	2.52	16	0.30	580
BCL565050-180K	18.00±10%	10	2.52	14	0.36	530
BCL565050-220K	22.00±10%	10	2.52	13	0.43	480
BCL565050-270K	27.00±10%	10	2.52	11.5	0.52	440
BCL565050-330K	33.00±10%	10	2.52	10.5	0.62	400
BCL565050-390K	39.00±10%	10	2.52	9.5	0.72	370
BCL565050-470K	47.00±10%	10	2.52	8.5	0.85	340
BCL565050-560K	56.00±10%	10	2.52	7.8	1.0	310
BCL565050-680K	68.00±10%	10	2.52	7.0	1.2	290
BCL565050-820K	82.00±10%	10	2.52	6.4	1.4	270
BCL565050-101K	100.00±10%	20	0.796	6.0	1.6	250
BCL565050-121K	120.00±10%	20	0.796	5.4	1.9	230
BCL565050-151K	150.00±10%	20	0.796	4.8	2.2	210
BCL565050-181K	180.00±10%	20	0.796	4.4	2.8	190
BCL565050-221K	220.00±10%	20	0.796	3.9	3.4	170
BCL565050-271K	270.00±10%	20	0.796	3.6	4.2	155
BCL565050-331K	330.00±10%	20	0.796	3.2	4.9	140
BCL565050-391K	390.00±10%	20	0.796	2.9	5.8	130
BCL565050-471K	470.00±10%	20	0.796	2.6	7.0	120
BCL565050-561K	560.00±10%	20	0.796	2.4	8.5	110
BCL565050-681K	680.00±10%	20	0.796	2.2	10	100
BCL565050-821K	8200.00±10%	20	0.796	2.0	13	90
BCL565050-102K	1000.00±10%	20	0.252	1.8	15	85
BCL565050-122J	1200.00±5%	30	0.252	1.5	17	75
BCL565050-152J	1500.00±5%	30	0.252	1.4	20	70
BCL565050-182J	1800.00±5%	30	0.252	1.3	30	60
BCL565050-222J	2200.00±5%	30	0.252	1.2	35	55
BCL565050-272J	2700.00±5%	30	0.252	1.1	55	45
BCL565050-332J	3300.00±5%	30	0.252	1.0	60	40
BCL565050-392J	3900.00±5%	30	0.252	1.0	70	38
BCL565050-472J	4700.00±5%	30	0.252	0.9	78	36
BCL565050-562J	5600.00±5%	30	0.252	0.8	85	33
BCL565050-682J	6800.00±5%	30	0.252	0.7	110	30
BCL565050-822J	8200.00±5%	30	0.252	0.6	125	28
BCL565050-103J	10000.00±5%	20	0.0796	0.5	150	25

## PERFORMANCE

**Inductance Change vs. DC Superposition Characteristics**



**Q vs. Frequency Response**



## ORDERING INFORMATION

**BCL 565050 330 K**

Model Series

Inductance Code:

First 2 digits are significant. Last digit denotes the number of trailing zeros. Values below  $10\mu\text{H}$ , "R" denotes the decimal point.

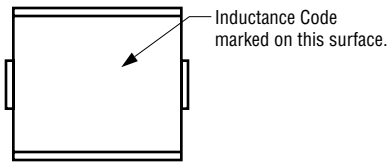
Inductance Tolerance:

J = 5%

K = 10%

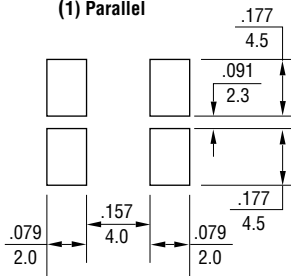
M = 20%

## OUTLINE DIMENSIONS (Inch/mm)

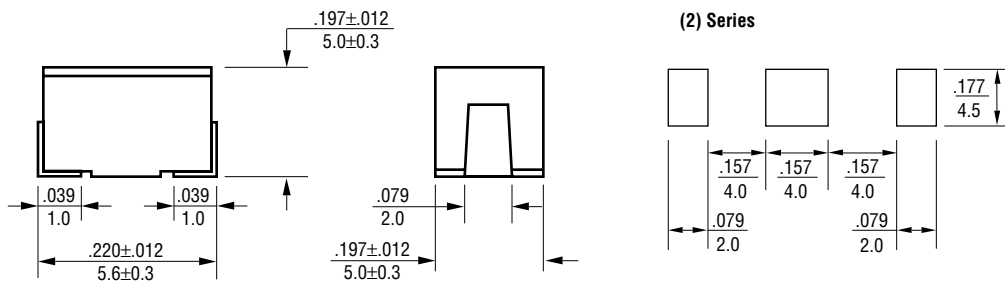


### Recommended PCB Layout

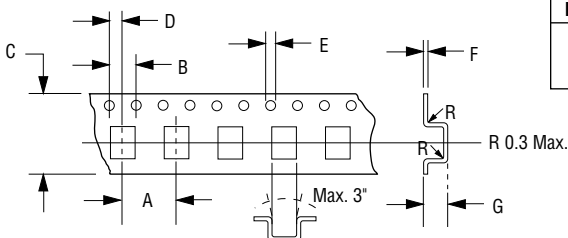
#### (1) Parallel



#### (2) Series



## PACKAGING (Inch/mm)



Dim.	A	B	C	D	E	F	G
	.472	.158	.630	.079	.059	.012	.210
	12.0	4.0	16.0	2.0	1.5	0.3	5.33

