

SMT Broadband Conical Inductors



- Full-length cap fully protects the coil and provides a large surface for pick and place.
- The self positioning mounting bracket has four soldered pads for excellent board adhesion.
- Designed specifically for broadband and high frequency applications.
- Operates as a series of narrow-band inductors throughout an operating frequency range of 10 MHz to 40 GHz.
- Ideal for use in ultra-wideband bias T's, where the conical inductor provides the path for the DC bias injection or extraction while isolating the power source from the active device.
- For a "flying lead" version that allows adjustment of the mounting angle consider the BCL series

Part number ¹	Inductance ² ±5% (µH)	DCR max (Ohms)	Irms ³ (mA)	
BCR-531JL_	0.53	0.15	830	
BCR-122JL_	1.20	1.05	200	
BCR-652JL_	6.5	0.70	510	
BCR-802JL_	8.0	3.39	150	

1. When ordering, please specify packaging code:

BCR-802JLC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (BCR-122JL: 500 parts per full reel;

BCR-531JL and BCR-802JL: 300 parts per full reel; BCR-652JL: 200 parts per full reel).

- B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added (\$25 charge), use code letter C instead.
- Inductance measured at 10 MHz, 0.1 Vrms, 0 Adc using an Agilent/HP 16092A fixture in an Agilent/HP 4291A impedance analyzer.
- 3. Current that causes a 40°C temperature rise from 25°C ambient.
- 4. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Terminations Tin-silver-copper over silver-platinum-glass frit **Weights** BCR-122: 34 mg; BCR-531: 101 mg; BCR-802: 107 mg; BCR-652: 472 mg

Ambient temperature -40°C to +85°C

Storage temperature Component: -40°C to +85°C.

Packaging: -40°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332 Packaging

BCR-122L: 500/7" reel; 2000/13" reel Plastic tape: 12 mm wide, 0.36 mm thick, 8 mm pocket spacing, 3.51 mm pocket depth BCR-531L: 300/7" reel; 1500/13" reel Plastic tape: 12 mm wide, 0.36 mm thick, 8 mm pocket spacing, 4.83 mm pocket depth BCR-652L: 200/7" reel; 750/13" reel Plastic tape: 24 mm wide, 0.33 mm thick, 12 mm pocket spacing, 6.45 mm pocket depth BCR-802L: 300/7" reel; 1500/13" reel Plastic tape: 12 mm wide, 0.36 mm thick, 8 mm pocket spacing, 4.83 mm pocket depth

PCB washing Only pure water or alcohol recommended



Specifications subject to change without notice. Please check our website for latest information.

Document 334R-1 Revised 01/29/10



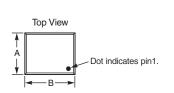
SMT Broadband Conical Inductors

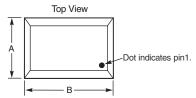
S-Parameter files

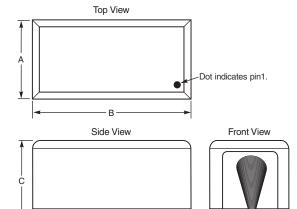
BCR-122

BCR-531, BCS-802

BCR-652

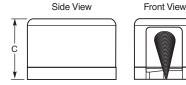






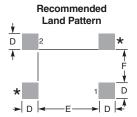


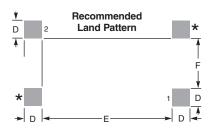




Recommended **Land Pattern**







*Pad is for mounting stability only. Do not connect to circuit.

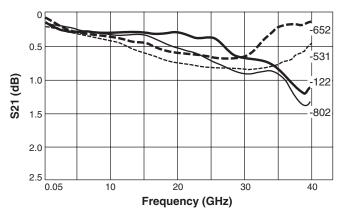
	Α	В	С	D	E	F
BCR-531	0.150±0.010/ <i>3,81±0,25</i>	0.220±0.010/ <i>5,59±0,25</i>	0.160±0.010/ <i>4,06±0,25</i>	0.040/1,02	0.150/ <i>3,81</i>	0.080/2,03
BCR-122	0.100±0.010/ <i>2,54±0,25</i>	0.120±0.010/ <i>3,05±0,25</i>	0.110±0.010/ <i>2,79±0,25</i>	0.030/ <i>0,76</i>	0.070/1,78	0.050/1,27
BCR-652	0.220±0.010/ <i>5,59±0,25</i>	0.440±0.010/ <i>11,18±0,25</i>	0.220 ± 0.010 / $5,59\pm0,25$	0.050/1,27	0.360/9,14	0.140/ <i>3,56</i>
BCR-802	0.150±0.010/ <i>3,81±0,25</i>	0.220±0.010/ <i>5,59±0,25</i>	0.160±0.010/ <i>4,06±0,25</i>	0.040/1,02	0.150/ <i>3,81</i>	0.080/ <i>2,03</i>

Dimensions (inches /millimeters)

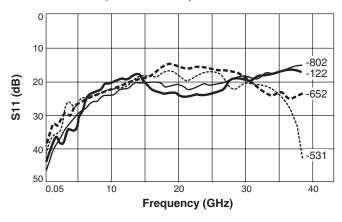
Response curves measured in a bias tee configuration with an Agilent/HP 8722ES network

Port 1 Port 2

Insertion Loss (BCL and BCR)



Return Loss (BCL and BCR)



Specifications subject to change without notice. Please check our website for latest information.

Document 334R-2 Revised 01/29/10