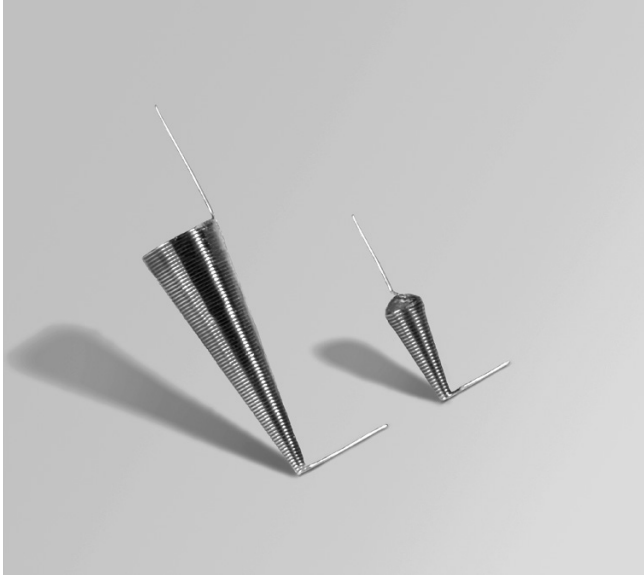


# Broadband Conical Inductors



- Designed specifically for broadband and high frequency applications.
- Operates as a series of narrow-band inductors throughout an operating frequency range of 10 MHz up to 40 GHz.
- Ideal for use in ultra-wideband bias Tees, where the conical inductor provides the path for the DC bias injection or extraction while isolating the power source from the active device.
- Supplied with “flying leads” that allow adjustment of the mounting angle.
- For a surface mount version with a self positioning mounting bracket, consider the BCR series.

**Terminations** Tin-silver-copper (96.5/3/0.5) over copper

**Ambient temperature** -40°C to +85°C with Irms current, +85°C to 125°C with derated current

**Storage temperature** Component: -40°C to +125°C  
Tape and reel packaging: -40°C to +80°C

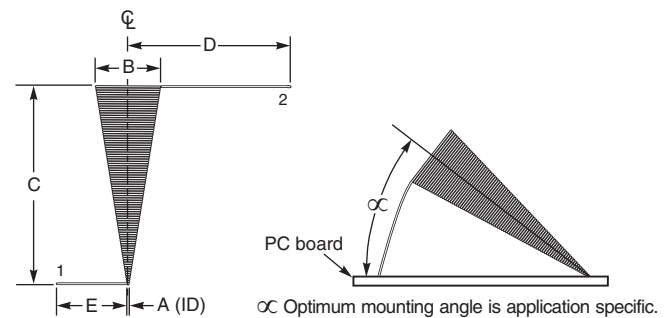
**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Packaging** 25 per tray

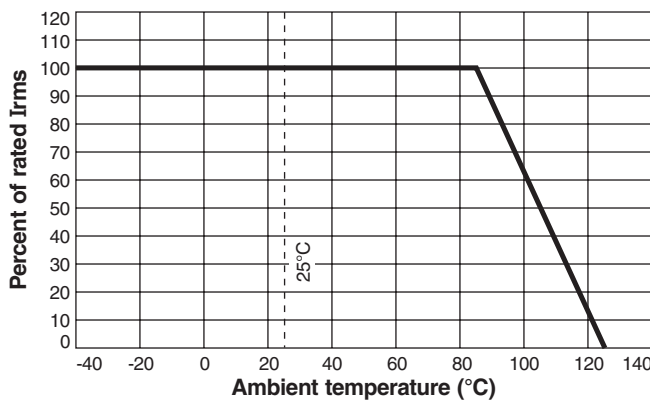
**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number	Inductance <sup>1</sup> ±5% (µH)	DCR max (Ohms)	Irms <sup>2</sup> (mA)	Weight mg
BCL-221JL	0.22	0.10	1200	10.2
BCL-531JL	0.53	0.15	1060	19.8
BCL-122JL	1.20	1.05	270	5.1
BCL-162JL	1.65	0.60	490	17.1
BCL-232JL	2.35	1.61	270	8.5
BCL-272JL	2.75	0.40	675	67.2
BCL-632JL	6.35	0.92	480	81.0
BCL-652JL	6.50	0.70	650	151
BCL-802JL	8.00	3.39	230	25.3

1. Inductance measured at 10 MHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4286A LCR meter and a Coilcraft CCF 1111 fixture.
2. Current that causes a 40°C rise from 25°C ambient.
3. Electrical specifications at 25°C.



## Irms Derating

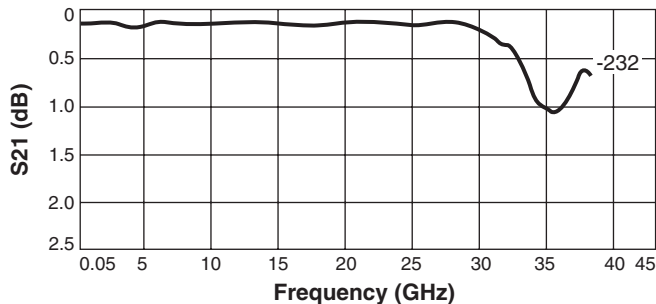
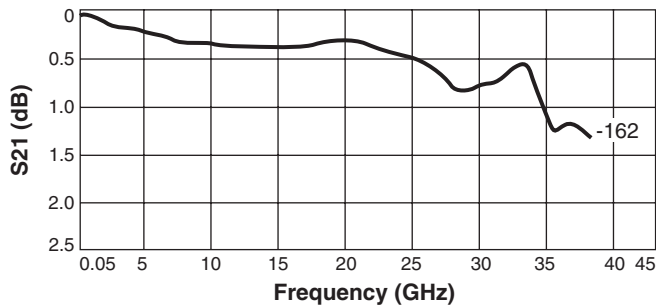
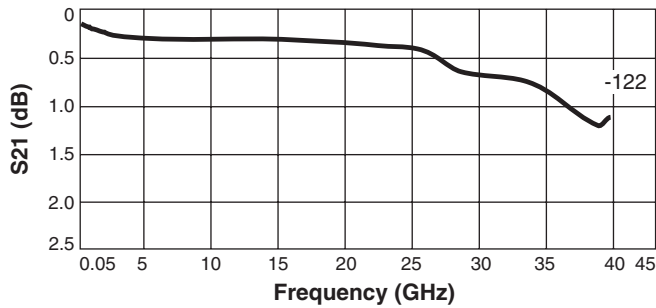
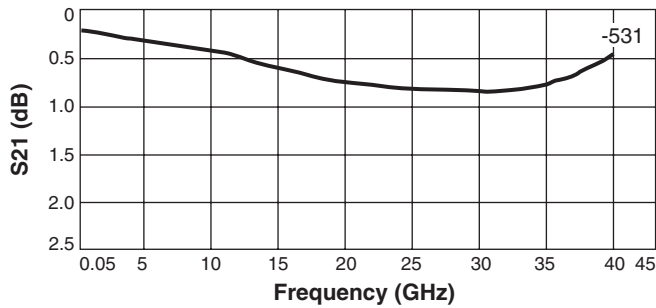
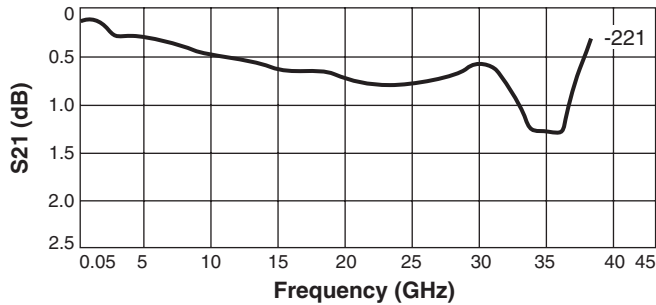


	Dimensions					
	A	B max	C max	D	E	
BCL-221	0.008 ±0.002 0,20 ±0,05	0.057 1,45	0.138 3,51	0.166 ±0.010 4,216 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-531	0.008 ±0.002 0,20 ±0,05	0.071 1,80	0.179 4,55	0.166 ±0.010 4,216 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-122	0.008 ±0.002 0,20 ±0,05	0.045 1,14	0.115 2,92	0.166 ±0.010 4,216 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-162	0.008 ±0.002 0,20 ±0,05	0.067 1,70	0.174 4,42	0.166 ±0.010 4,216 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-232	0.008 ±0.002 0,20 ±0,05	0.060 1,52	0.150 3,81	0.166 ±0.010 4,216 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-272	0.008 ±0.002 0,20 ±0,05	0.107 2,72	0.310 7,87	0.275 ±0.010 6,985 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-632	0.008 ±0.002 0,20 ±0,05	0.116 2,95	0.340 8,62	0.275 ±0.010 6,985 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-652	0.008 ±0.002 0,20 ±0,05	0.140 3,56	0.435 11,05	0.390 ±0.010 9,906 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm
BCL-802	0.008 ±0.002 0,20 ±0,05	0.074 1,88	0.237 6,02	0.180 ±0.010 4,572 ±0,25	0.100 ±0.010 2,54 ±0,25	inches mm

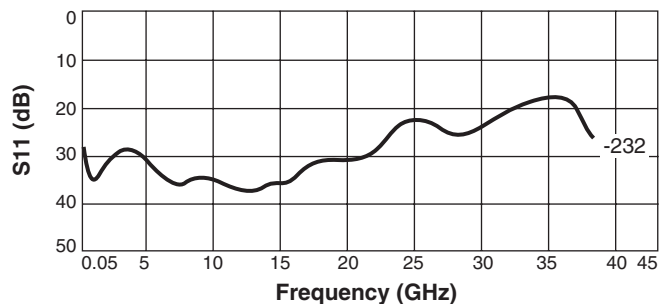
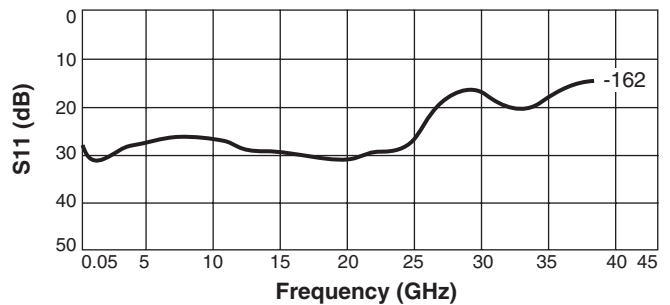
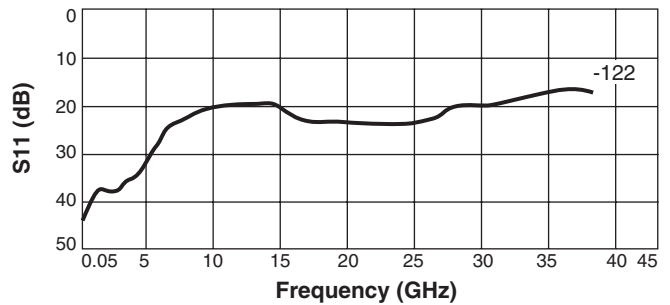
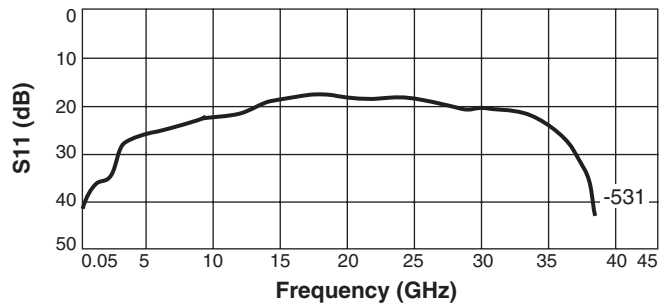
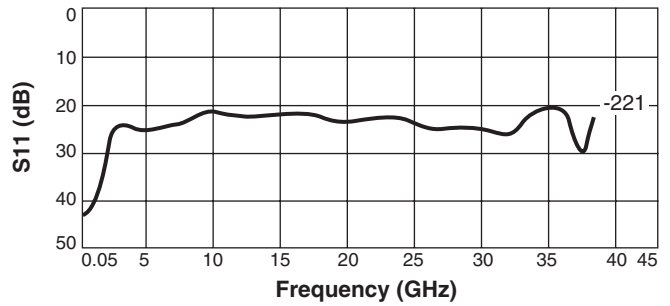


# Broadband Conical Inductors

## Insertion Loss



## Return Loss



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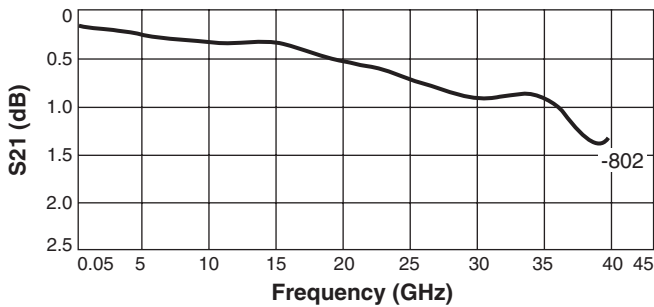
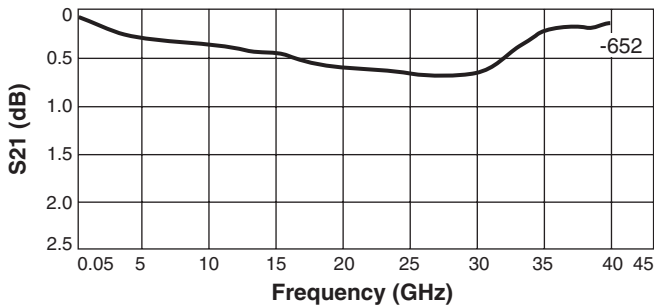
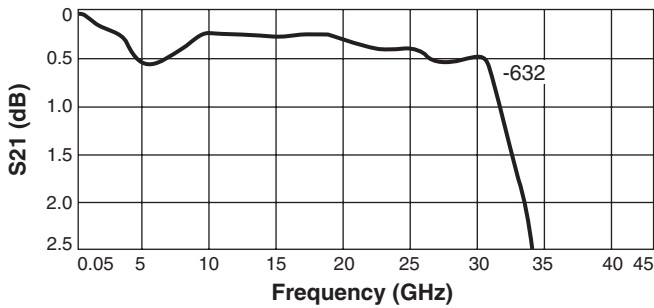
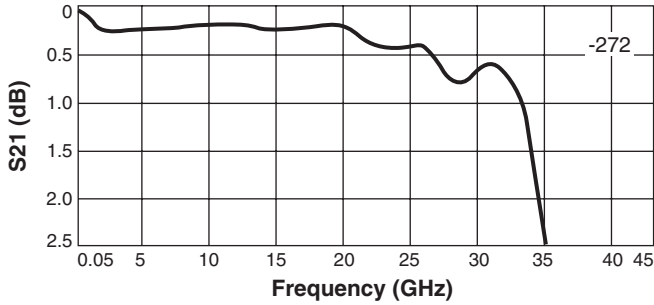
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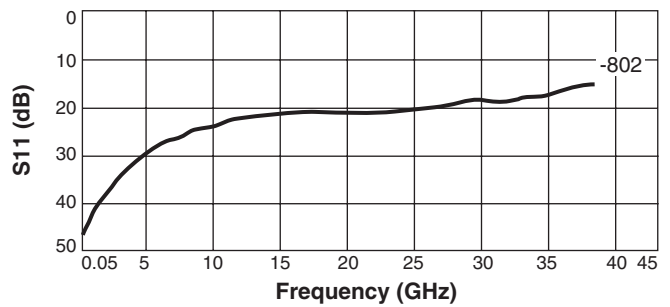
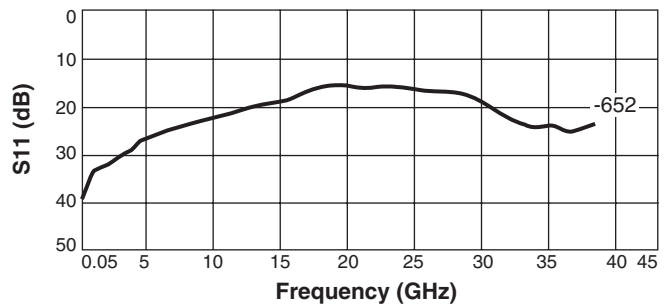
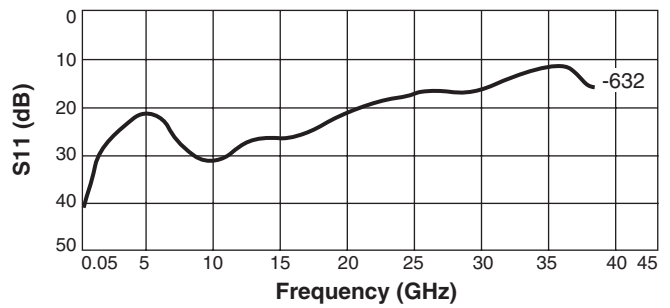
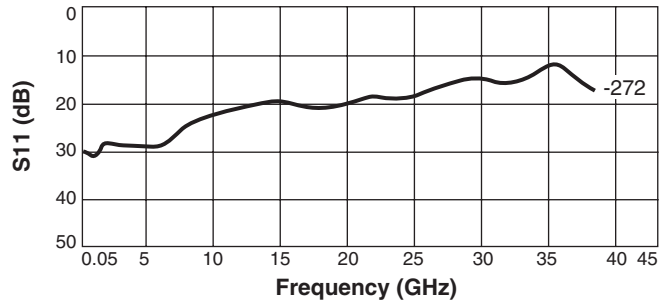


# Broadband Conical Inductors

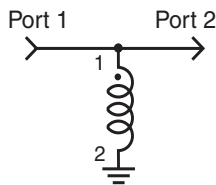
## Insertion Loss



## Return Loss



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



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