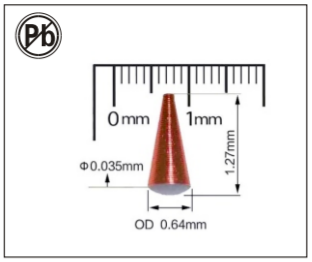
BROADBAND CONICAL INDUCTORS

BC Series



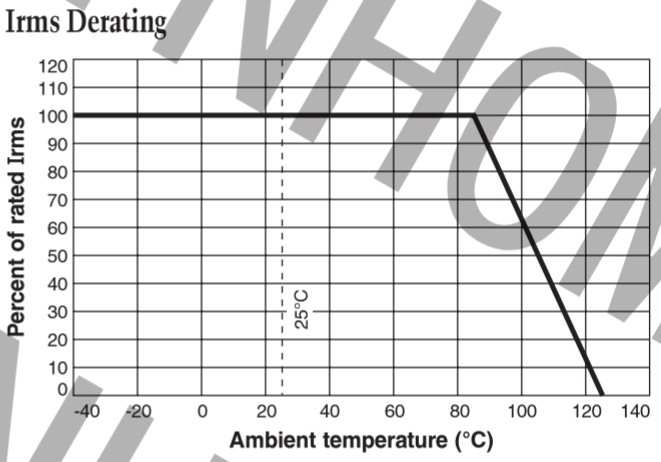
FEATURES:

- 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.

ELECTRICAL CHARACTERISTICS:

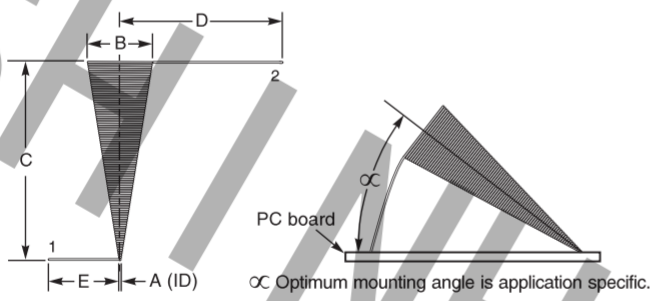
Part number	Inductance ±5% (µH)	DCR max (Ohms)	Irms (mA)
BC-R22J	0.22	0.10	1200
BC-R53J	0.53	0.15	1060
BC-1R2J	1.20	1.05	270
BC-1R6J	1.65	0.60	490
BC-2R3J	2.35	1.61	270
BC-2R7J	2.75	0.40	675
BC-6R3J	6.35	0.92	480
BC-6R5J	6.50	0.70	650
BC-8R0J	8.00	3.39	230

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



TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



	A	B max	C max	D	E
BC-R22J	0,20 ±0,05	1,45	3,51	4,216 ±0,25	2,54 ±0,25
BC-R53J	0,20 ±0,05	1,80	4,55	4,216 ±0,25	2,54 ±0,25
BC-1R2J	0,20 ±0,05	1,14	2,92	4,216 ±0,25	2,54 ±0,25
BC-1R6J	0,20 ±0,05	1,70	4,42	4,216 ±0,25	2,54 ±0,25
BC-2R3J	0,20 ±0,05	1,52	3,81	4,216 ±0,25	2,54 ±0,25
BC-2R7J	0,20 ±0,05	2,72	7,87	6,985 ±0,25	2,54 ±0,25
BC-6R3J	0,20 ±0,05	2,95	8,62	6,985 ±0,25	2,54 ±0,25
BC-6R5J	0,20 ±0,05	3,56	11,05	9,906 ±0,25	2,54 ±0,25
BC-8R0J	0,20 ±0,05	1,88	6,02	4,572 ±0,25	2,54 ±0,25

Notes

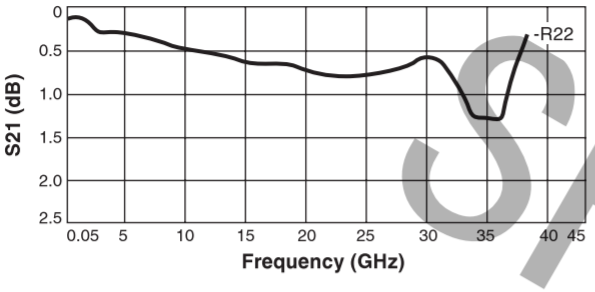
Ambient temperature –40°C to +85°C with Irms current, +85°C to125°C with derated current

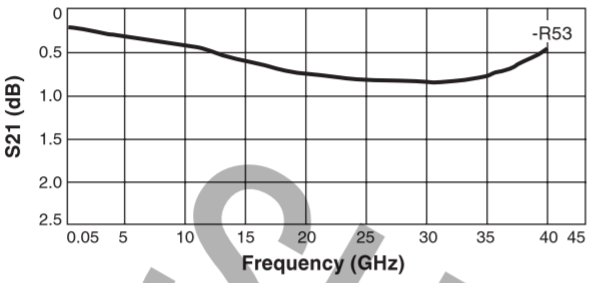
Storage temperature Component: –40°C to +125°C Tape and reel packaging: –40°C to +80°C

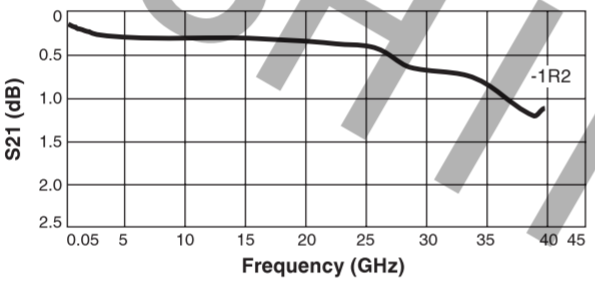
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

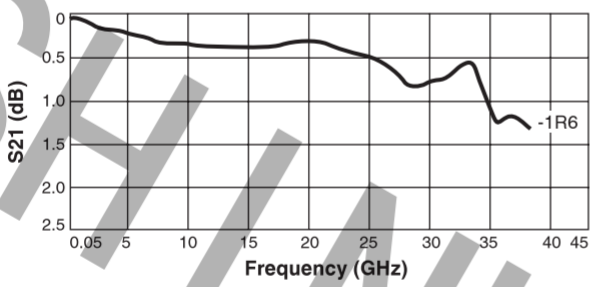
Packaging 25 per tray

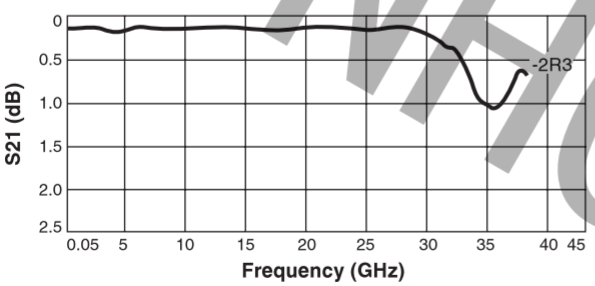
Insertion Loss



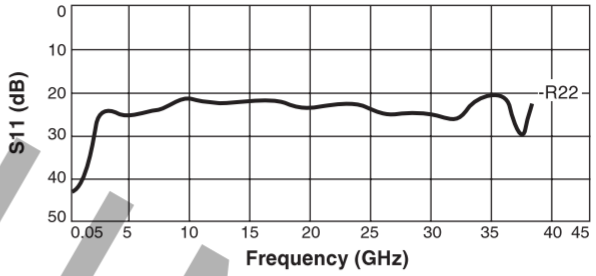


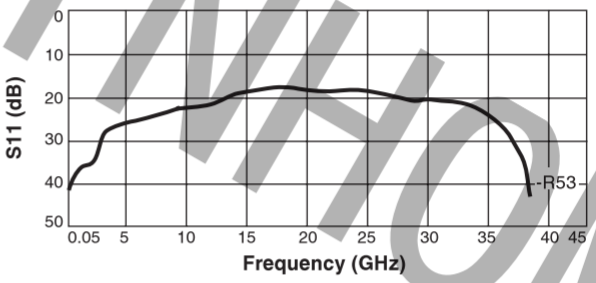


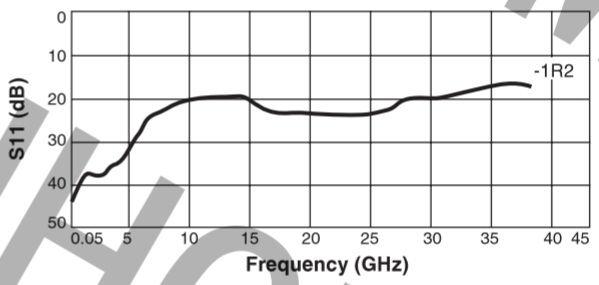


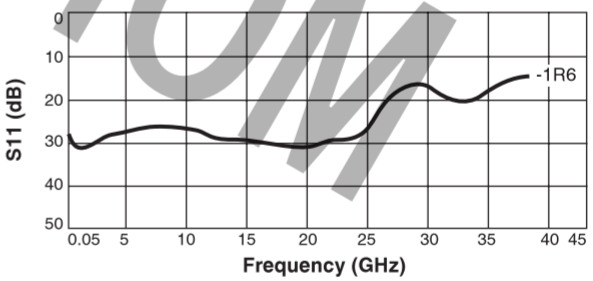


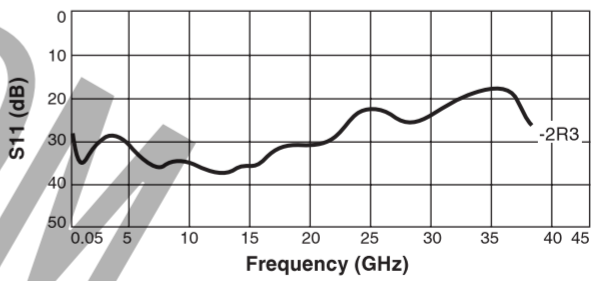
Return Loss



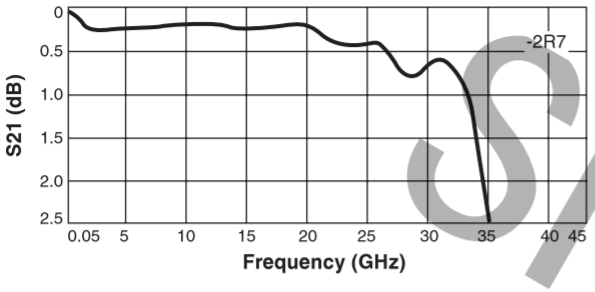


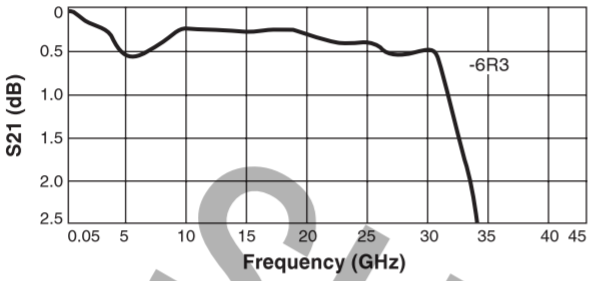


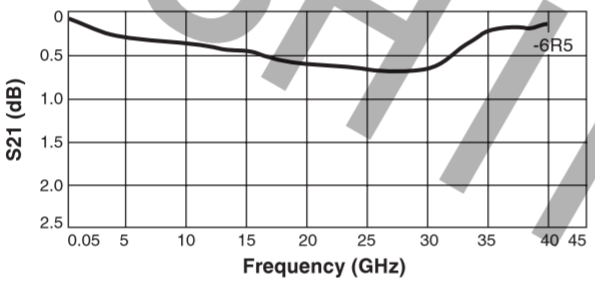


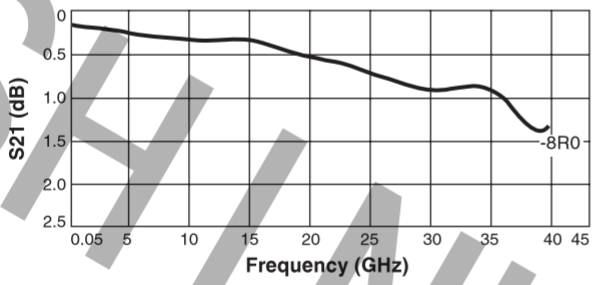


Insertion Loss

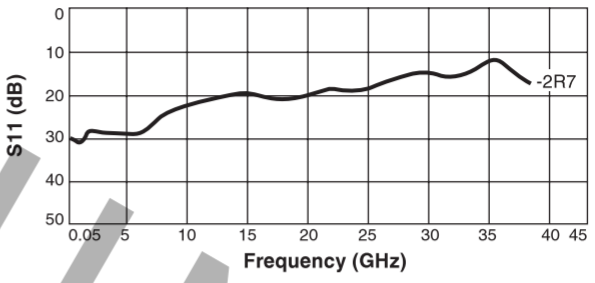


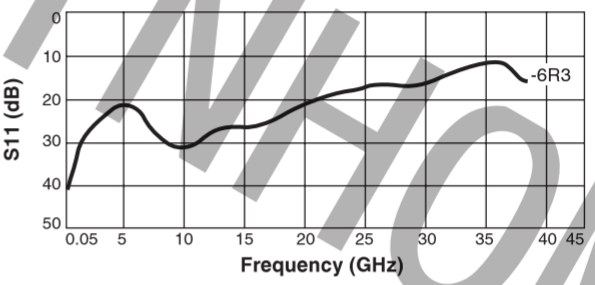


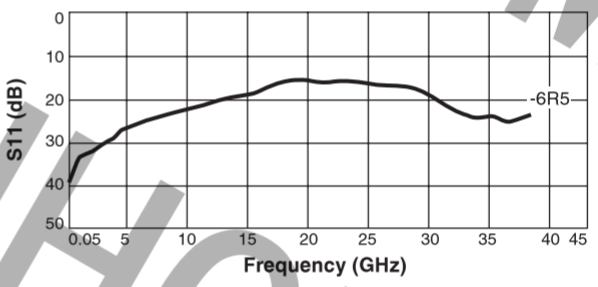


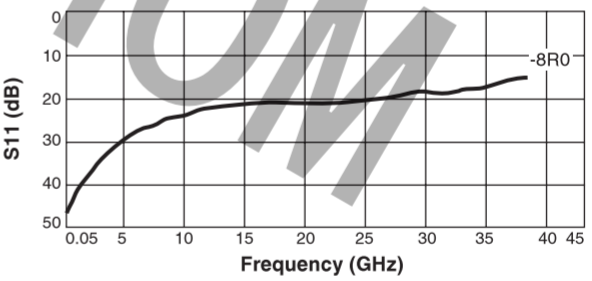


Return Loss









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