

Series: BE90A, Compression Mount, Ganged Cable Assembly

BE90A Series – DOUBLE ROW



PART NUMBER:

BE90A-X-XXXX-X-X-XX-XXXX

TRANSMISSION TYPE

- S: STRIPLINE
- M: MICROSTRIP

END 2 CONNECTOR

- 10BJ: 1.0MM JACK
- 10SP: 1.0MM PLUG

PHASE MATCHING SPEC (RANGE)

- 1: 1 PICO-SECOND
- 2: 2 PICO-SECONDS
- 5: 5 PICO-SECONDS
- N: NO PHASE MATCHING

OVERALL ASSEMBLY LENGTH (OAL)

XXXX (MILLIMETERS)
(0100 MIN)

NO OF POSITION (PER ROW)

- 2X: -04, -08, -12, -16
- 1X: -02, -04, -08, -12

NO OF ROWS

- 2
- 1

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MATERIAL AND FINISHES

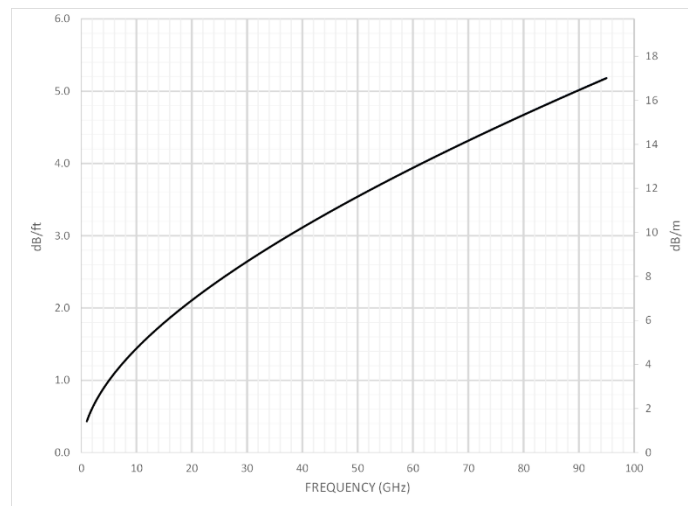
	Material	Finish
Mounting Screws	Stainless Steel	Passivated
PCB Nuts	Brass	3μ" Gold over Nickel
Housing	Brass	1μ" Gold over Nickel
Compression Pogo Connector	Brass	10μ" Gold over Nickel

ELECTRICAL DATA

Impedance	50 Ohm
Frequency Range	DC to 90 GHz
Velocity of Propagation	70%
Capacitance	95 pF/meter
Time Delay	4.76 ns/meter
VSWR ¹	DC to 40GHz: 1.25:1 Max 40GHz to 67GHz: 1.4:1 Max 67GHz to 90GHz: 2.0:1 Max
Insertion Loss	See Graph

¹Including BOR+1.75mm PCB trace

MAXIMUM INSERTION LOSS @ T=25°C²



²Not including connector losses. Connector losses can be approximated as $0.045x\sqrt{F}(\text{GHz})$ dB/connector.

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MECHANICAL DATA

Mating Cycles	1000 cycles
Outer Diameter (cable only)	1.42mm
Mass	5.2 grams/meter
Minimum Bend Radius (Static)	5.0 mm
Minimum Bend Radius (Dynamic)	10.0 mm
Minimum Connector Retention	2.26 kg

ENVIRONMENTAL DATA

Temperature Range	-65 to 125°C
Thermal Shock	EIA-364-32, -55 to +85°C, 100 Cycles
Thermal Aging	EIA-364-17, 105°C, 250 Hours
Humidity	EIA-364-31, 25 to 65°C, 90%-95% Relative Humidity, 240 Hours

CONNECTOR OPTIONS

End Option	Description	Drawing
10SP	1.00mm Plug	PRF10-P-C-VP-047A-SS Drawing
10SJ	1.00mm Jack	PRF10-J-C-VP-047A-BS Drawing

REFERENCED DOCUMENTS

Description	No Of Rows	Drawing
Cable Assembly	Double Row	BE90A-X-XXXX-X-X-XX-XXXX Drawing
	Single Row	BE90A-X-XXXX-X-1-XX-XXXX Drawing
Recommended Footprint	Double Row	BE90A-X-XXXX-X-X-XX-XXXX-Footprint Drawing
	Single Row	BE90A-X-XXXX-X-1-XX-XXXX-Footprint Drawing
Replacement Block	Double Row	BE90B-J-X-X-XX Drawing
	Single Row	BE90B-J-1-X-XX Drawing
Replacement Cable	Double/Single Row	BE90C-X-XXXX-X-XX-XXXX Drawing

USE OF PRODUCT SPECIFICATION SHEET

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