

Series: BE70A, Compression Mount, Ganged Cable Assembly

## BE70A Series – DOUBLE ROW



PART NUMBER: BE70A-X-XXXX-X-X-XX-XXXX

<u>TRANSMISSION TYPE</u>	<u>OVERALL ASSEMBLY LENGTH (OAL)</u>
-S: STRIPLINE -M: MICROSTRIP	XXXX (MILLIMETERS) (0152 MIN) (SEE NOTE 6)
<u>END 2 CONNECTOR</u> (SEE TABLE 2, SHT 3)	<u>NO OF POSITION (PER ROW)</u> -02, -03, -04, -06, -08, -10, -12, -14, -16 (SEE TABLE 4, SHT 3)
<u>PHASE MATCHING SPEC (RANGE)</u> -2: 2 PICO-SECONDS -5: 5 PICO-SECONDS -N: NO PHASE MATCHING	<u>NO OF ROWS</u> -1 (-02, -04, -08 & -12 POSITIONS ONLY) -2 (-03 THROUGH -16 POSITIONS ONLY)

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## MATERIAL AND FINISHES

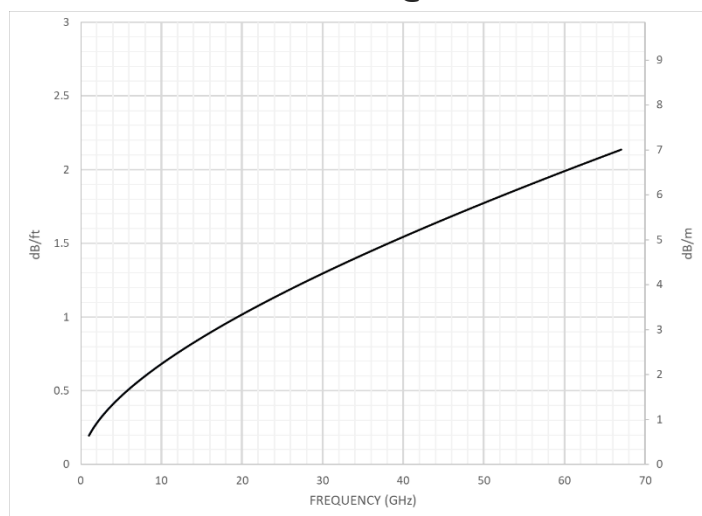
	Material	Finish
Mounting Screws	Stainless Steel	Passivated
PCB Nuts	Brass	3μ" Gold over Nickel
Housing	Brass	1μ" Gold over Nickel
Compression Pogo Connector	Brass	10μ" Gold over Nickel

## ELECTRICAL DATA

Impedance	50 Ohm
Frequency Range	DC to 67 GHz
Velocity of Propagation	79%
Capacitance	84 pF/meter
Time Delay	4.20 ns/meter
VSWR <sup>1</sup>	DC to 40 GHz: 1.2 Max 40 GHz to 67: 1.9 Max
Insertion Loss	See Graph

<sup>1</sup>Including 20mm Stripline + BOR + 12" BE70 Cable

### MAXIMUM INSERTION LOSS @ T=25°C<sup>2</sup>



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

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## MECHANICAL DATA

Mating Cycles	1000 cycles
Outer Diameter (cable only)	2.54mm
Minimum Bend Radius (Static)	8.9 mm
Minimum Connector Retention	6.80 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
18SP	1.85mm Plug	<a href="#">PRF18-P-C-EP-086-SS Drawing</a>
18SJ	1.85mm Jack	<a href="#">PRF18-J-C-EP-086-SS Drawing</a>

## REFERENCED DOCUMENTS

Description	No Of Rows	Drawing
Cable Assembly	Double Row	<a href="#">BE70A-X-XXXX-X-X-XX-XXXX Drawing</a>
	Single Row	<a href="#">BE70A-X-XXXX-X-1-XX-XXXX Drawing</a>
Recommended Footprint	Double Row	<a href="#">BE70A-S-XXXX-X-X-XX-XXXX-Footprint Drawing</a> <a href="#">BE70A-M-XXXX-X-X-XX-XXXX-Footprint Drawing</a>
	Single Row	<a href="#">BE70A-X-XXXX-X-1-XX-XXXX-Footprint Drawing</a>
Replacement Block	Double Row	<a href="#">BE70B-J-X-X-XX Drawing</a>
	Single Row	<a href="#">BE70B-J-1-X-XX Drawing</a>
Replacement Cable	Double/Single Row	<a href="#">BE70C-X-XXXX-X-XX-XXXX Drawing</a>

## USE OF PRODUCT SPECIFICATION SHEET

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