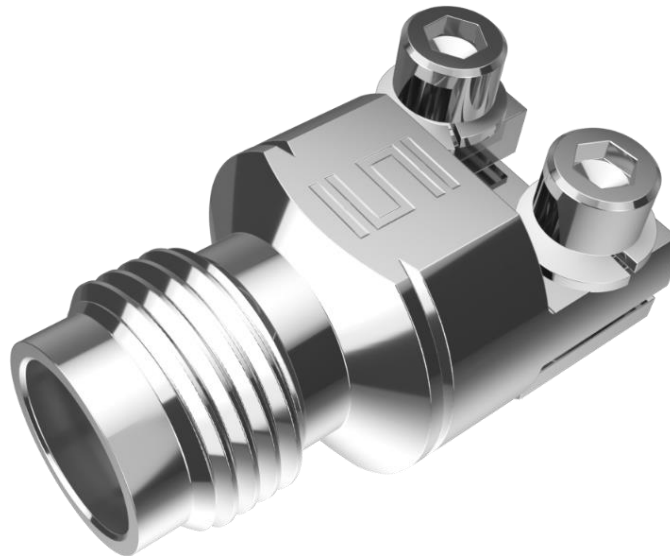


Series: 1.85mm Jack, PCB Solderless Edge Launch, 50 Ω



Part Number: 185-J-P-EP-ST-EL-01-X

<u>SERIES</u> 185: 1.85MM		<u>PACKAGING</u> -BLANK: INDIVIDUALLY BAGGED -B: BULK PACKAGED (QTY=100 MAX)
<u>GENDER</u> -J: JACK		<u>OPTION</u> -01: PCB THICKNESS 0.040" TO 0.100"
<u>TYPE</u> -P: PCB		<u>TERMINATION</u> -EL: EDGE LAUNCH
<u>FINISH</u> -EP: 50 μ " EXTRA HEAVY GOLD CENTER CONTACT, PASSIVATED OUTER CONTACT		<u>ORIENTATION</u> -ST: STRAIGHT

connector part	Material	Finish
Body and Backing Plate	Stainless Steel	Passivate
Center Contact	Beryllium Copper	50 μ " Gold over Nickel
Dielectric Insulator	Ultem 1000	N/A
Dielectric Bead	PTFE	N/A
Mounting Screws/Lock Washers	Stainless Steel	Passivate

Series: 1.85mm Jack, PCB Solderless Edge Launch, 50 Ω

ELECTRICAL DATA

Impedance	50 Ohm
Frequency Range	DC to 67 GHz
VSWR ¹	1.15 Typ: DC to 18 GHz 1.2 Typ: 18 to 40 GHz 1.3 Typ: 40 to 67 GHz
Insertion Loss ²	$0.03 \sqrt{F(\text{GHz})} \text{ dB max}$
LLCR - Center Contact	<6.0 m Ω
LLCR - Outer Contact	<2.0 m Ω
DWV - Dielectric Withstanding Voltage ³	500 VRMS Min
IR - Insulation Resistance	5,000 M Ω Min
Voltage Rating @ Sea Level ³	170 VRMS Max

¹ VSWR per connector when tested on Samtec multi-layer test PCB.

² Single connector insertion loss only.

³ May be further limited by PCB design.

MECHANICAL DATA

Interface	I.A.W. IEE Std 287, fig. 1.4
Recommended Mating Coupler Torque	0.9-1.13 N-m (8-10 in-Lb.)
Durability	500 Cycles minimum
Force to Engage / Disengage	$\leq 0.23 \text{ N-m (2.0 in-Lb.) Max Torque}$
Center Contact Retention	17.8 N (4.0 Lb.) Minimum Axial
Mass	4.31g (0.0095 pounds)

ENVIRONMENTAL DATA

Temperature Range	-65 to +165°C
Thermal Shock	MIL-STD-202, method 107, cond. F (-65°C to +150°C)
Vibration	MIL-STD-202, method 204, cond. D (20g peak)
Mechanical Shock	MIL-STD-202, method 213, cond. I (100g peak)

REFERENCED DOCUMENTS

Configuration and Features	DRAWING
Edge Launch	185-J-P-EP-ST-EL-01-X

Series: 1.85mm Jack, PCB Solderless Edge Launch, 50 Ω

USE OF PRODUCT SPECIFICATION SHEET

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