

SMP

CONNECTOR SERIES

INTERFACE MATING DIMENSIONS

SPECIFICATIONS

CONTENT:

- Direct Solder Plug
- R/A PCB Mount Plug
- PCB Mount Plug
- SMT End Launch Plug
- SMT Plug
- R/A Direct Solder Jack
- Direct Solder Jack
- Jack To Jack Bullet Adaptor

Bridging Gaps

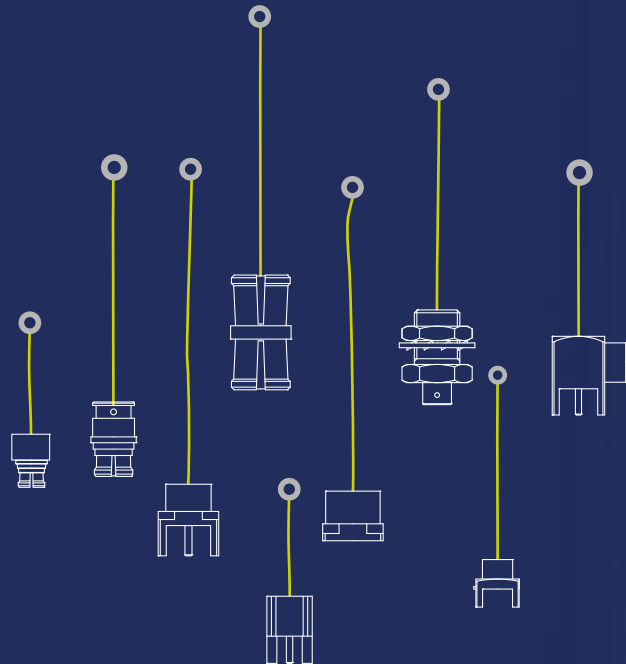


SMP series

Frontlynk developed the SMP series to fulfill the customer's demands for higher-frequency and miniaturized connectors. These are easy snap-on connectors: operable up to 40 GHz.

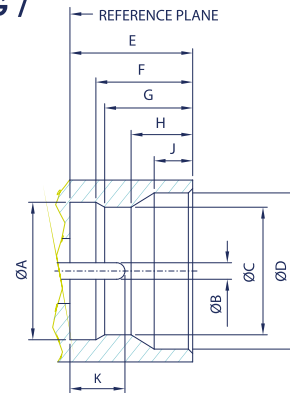
These SMP connectors are ideal for board to board interconnections by joining plugs on different boards with a jack-to-jack adaptor in between.

The SMP interface provides three different levels of retention force: full detent, limited detent, and smooth bore. Full detent is often used for connections with highest retention, limited detent is only for retaining the bullet, and smooth bore is for the lowest retention.

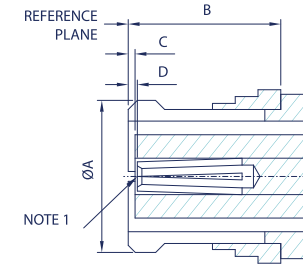


INTERFACE MATING DIMENSIONS

PLUG /

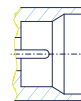


JACK /



PLUG						
Letter	Millimeters					
	Smooth Bore		Limited Detent		Full Detent	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
A	3.125	3.225	3.125	3.225	3.125	3.225
B	0.356	0.406	0.356	0.406	0.356	0.406
C	3.125	3.225	2.998	3.098	2.896	2.996
D	3.531	3.683	3.531	3.683	3.531	3.683
E	2.784	2.884	2.784	2.884	2.784	2.884
F	-	-	2.185	2.285	2.185	2.285
G	-	-	1.982	2.082	1.982	2.082
H	1.397	1.447	1.397	1.447	1.397	1.447
J	0.839	0.939	0.839	0.939	0.839	0.939
K	1.143	1.397	1.143	1.397	1.143	1.397

JACK		
Letter	Millimeters	
	Minimum	Minimum
A	-	3.34
B	3.35	-
C	0	0.2
D	0	-



Smooth Bore



Limited Detent



Full Detent

NOTE 1: I.D. TO MEET VSWR AND CONTACT RESISTANCE WHEN MATED WITH 0.356 / 0.406 MM DIA. PIN.

SPECIFICATIONS

Electrical /

Impedance	50 Ohm	50 Ohm
Frequency Range	Bullet Adaptor (6.45mm Length) Semi-Rigid Straight Connectors	0 - 40 GHz
	All Other In-Series Adaptors, End Launch Semi-Rigid Right Angle Connectors	0 - 18 GHz
	PCB Mount	0 - 12 GHz
Working Voltage	335 VRMS	
Dielectric Withstanding Voltage	500 VRMS	
VSWR	Bullet Adaptor (6.45mm Length)	1.3 Max. 0 - 26.5 GHz
		1.5 Max. 26.5 - 40 GHz
	Semi-Rigid Straight Connectors	1.2 Max. 0 - 18 GHz
		1.35 Max. 18 - 26.5 GHz
		1.7 Max. 26.5 - 40 GHz
	Semi-Rigid Straight Connectors	1.1 Max. 0 - 4 GHz
1.15 Max. 4 - 12 GHz		
1.2 Max. 12 - 18 GHz		
Semi-Rigid Right Angle Connectors	1.2 Max. 0 - 18 GHz	
	Center Contact	6 Milliohms Max.
Contact Resistance	Outer Contact	2 Milliohms Max.
Insulator Resistance	5000 Megohms Min.	
Insertion Loss	In-Series Adaptors	0.1 \sqrt{F} dB max. / 10 GHz

Material /

Parts Name	Material	Finish
Body, Metal Parts	Brass per QQ-B-626	Gold 3 micro-inches
Center Contacts	Male: Brass per QQ-B-626	Gold 30 micro-inches
	Female: Beryllium copper per QQ-C-530	Gold 30 micro-inches
Insulators	Teflon	None
C Ring	Beryllium copper per QQ-C-530	Gold 3 micro-inches
Crimp Ferrules	Annealed Brass	Gold 3 micro-inches

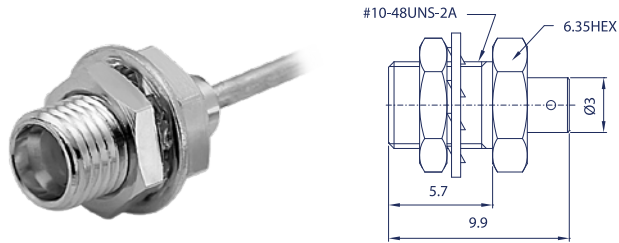
NOTE: Other Material / Finish is Available on Request.

Mechanical & Environmental /

Engagement Force	Full Detent : 68 N Max. Limited Detent : 45 N Max. Smooth Bore : 9 N Max.
Disengagement Force	Full Detent : 22 N Max. Limited Detent : 9 N Min. Smooth Bore : 2.2 N Max
Contact Retention	7 N Min.
Durability (Mating)	Full Detent : 100 cycles Min. Limited Detent : 500 cycles Min. Smooth Bore : 1000 cycles Min.
Temperature Range	-65°C to 155°C
Vibration	MIL-STD-202 Method 204, Condition B.
Temperature Shock	MIL-STD-202 Method 107, Condition B.
Moisture Resistance	MIL-STD-202 Method 106
Mechanical Shock	MIL-STD-202 Method 213, Condition A.

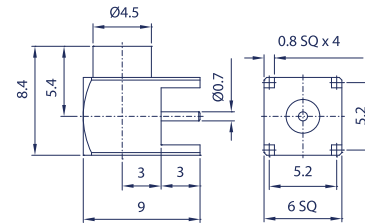
SMP

series



DIRECT SOLDER PLUG

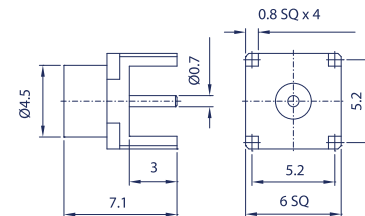
Model No.	Cable Group	Impedance
FL65P2-B55	.085", .086" .047"	50



R/A PCB MOUNT PLUG

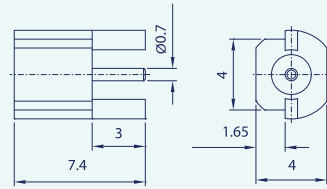
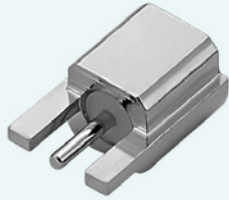
Model No.	Cable Group	Impedance
FL65P5-NR502	N/A	50

04



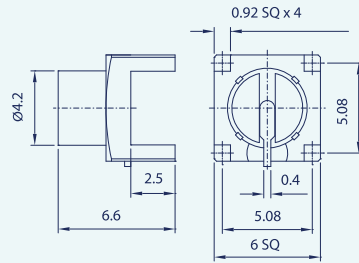
PCB MOUNT PLUG

Model No.	Cable Group	Impedance
FL65P5-NS502	N/A	50



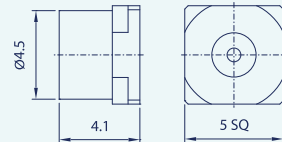
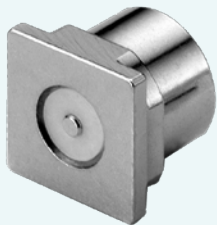
SMT END LAUNCH PLUG

Model No.	Cable Group	Impedance
FL65P6-LS502	N/A	50



SMT PLUG

Model No.	Cable Group	Impedance
FL65P6-NS500	N/A	50

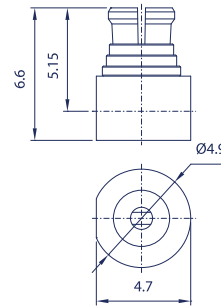


SMT PLUG

Model No.	Cable Group	Impedance
FL65P6-NS502	N/A	50

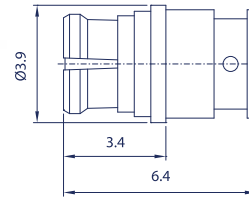
SMP

series



R/A DIRECT SOLDER JACK

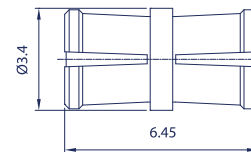
Model No.	Cable Group	Impedance
FL65J2-NR5	.085", .086" .047"	50



DIRECT SOLDER JACK

Model No.	Cable Group	Impedance
FL65J2-NS5	.085", .086" .047"	50

06



JACK TO JACK BULLET ADAPTOR

Model No.	Cable Group	Impedance
FL65G8-NS5	N/A	50

SPECIFICATIONS

Electrical /

Impedance	50 Ohm	50 Ohm
Frequency Range	Bullet Adaptor (6.45mm Length) Semi-Rigid Straight Connectors	0 - 40 GHz
	All Other In-Series Adaptors, End Launch Semi-Rigid Right Angle Connectors	0 - 18 GHz
	PCB Mount	0 - 12 GHz
Working Voltage	335 VRMS	
Dielectric Withstanding Voltage	500 VRMS	
VSWR	Bullet Adaptor (6.45mm Length)	1.3 Max. 0 - 26.5 GHz
		1.5 Max. 26.5 - 40 GHz
	Semi-Rigid Straight Connectors	1.2 Max. 0 - 18 GHz
		1.35 Max. 18 - 26.5 GHz
		1.7 Max. 26.5 - 40 GHz
	Semi-Rigid Straight Connectors	1.1 Max. 0 - 4 GHz
1.15 Max. 4 - 12 GHz		
1.2 Max. 12 - 18 GHz		
Semi-Rigid Right Angle Connectors	1.2 Max. 0 - 18 GHz	
	Center Contact	6 Milliohms Max.
Contact Resistance	Outer Contact	2 Milliohms Max.
Insulator Resistance	5000 Megohms Min.	
Insertion Loss	In-Series Adaptors	0.1 \sqrt{F} dB max. / 10 GHz

Material /

Parts Name	Material	Finish
Body, Metal Parts	Brass per QQ-B-626	Gold 3 micro-inches
Center Contacts	Male: Brass per QQ-B-626	Gold 30 micro-inches
	Female: Beryllium copper per QQ-C-530	Gold 30 micro-inches
Insulators	Teflon	None
C Ring	Beryllium copper per QQ-C-530	Gold 3 micro-inches
Crimp Ferrules	Annealed Brass	Gold 3 micro-inches

NOTE: Other Material / Finish is Available on Request.

Mechanical & Environmental /

Engagement Force	Full Detent : 68 N Max. Limited Detent : 45 N Max. Smooth Bore : 9 N Max.
Disengagement Force	Full Detent : 22 N Max. Limited Detent : 9 N Min. Smooth Bore : 2.2 N Max
Contact Retention	7 N Min.
Durability (Mating)	Full Detent : 100 cycles Min. Limited Detent : 500 cycles Min. Smooth Bore : 1000 cycles Min.
Temperature Range	-65°C to 155°C
Vibration	MIL-STD-202 Method 204, Condition B.
Temperature Shock	MIL-STD-202 Method 107, Condition B.
Moisture Resistance	MIL-STD-202 Method 106
Mechanical Shock	MIL-STD-202 Method 213, Condition A.