High Performance SMA Connectors

DC to 27 GHz

withwave
Versatile RF & MW Test Solutions

Withwave's High Performance SMA Connectors are specially designed for RF/microwave application. This field replaceable connectors are easy to install/replace and precision manufacturing allows superior electrical performance up to *27 GHz*.
These connectors are available with three mounting configurations and assembly is preciously controlled to ensure consistency of performance.

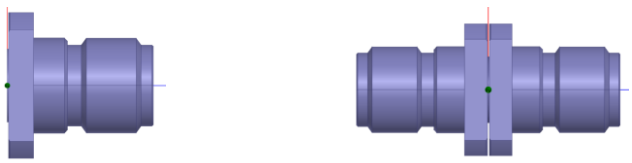
Specification

Scope	Items	Specification
Electrical	Freq. range	DC to 27 GHz
	Impedance	50 Ohm
	VSWR(Max)	1.10 :1 (DC to 18 GHz) 1.15 :1 (18 to 27 GHz)
	Insulation Resistance (Min)	5,000 megaohms
	RF Leakage	- 90 dB
Material	Body	Stainless Steel (Passivated)
	Center Contact	BeCu (gold plated)
	Insulator	Special Dielectric
Environmental	Temperature	-40 to +135 degree
	Thermal Shock	MIL-STD-202, Method 107, Condition A
	Corrosion	MIL-STD-202, Method 101, Condition B
	Vibration	MIL-STD-202, Method 204, Condition D
	Moisture Resistance	MIL-STD-202, Method 106

**RoHS Compliant*

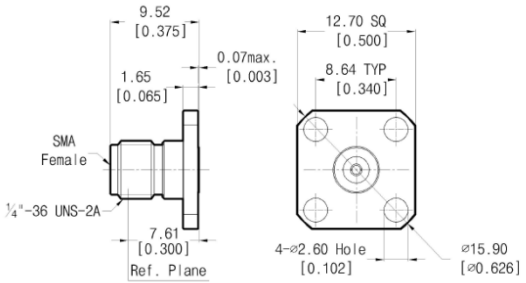
Design Assistance

- 3D Model for Mechanical Layout (STEP file)
- **ANSYS HFSS models** (version 17.0 or newer) for 3D EM(Electromagnetic) Simulation



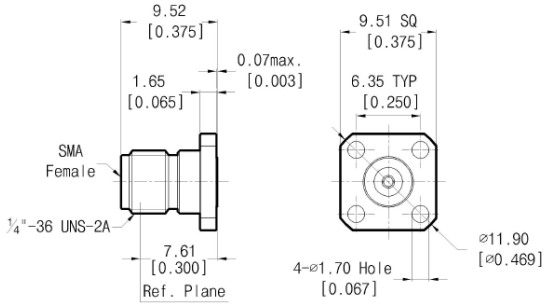
■ Drawing_ High Performance SMA Jack (Female)

4 Hole (12.7 mm SQ)



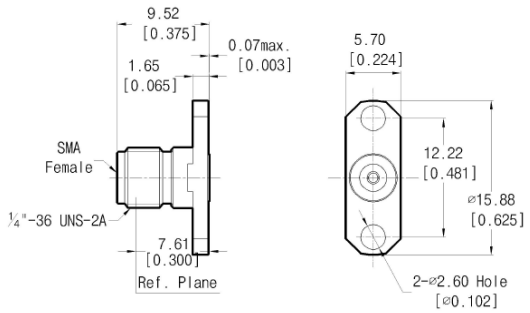
Accept Pin Dia.	Part No.
0.036”	PM06FS035

4 Hole (9.51 mm SQ)



Accept Pin Dia.	Part No.
0.036”	PM06FS040

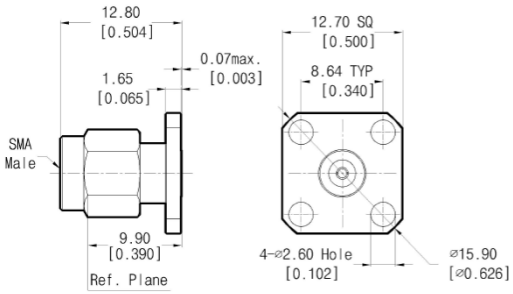
2 Hole (15.88 mm Long)



Accept Pin Dia.	Part No.
0.036”	PM06FS045

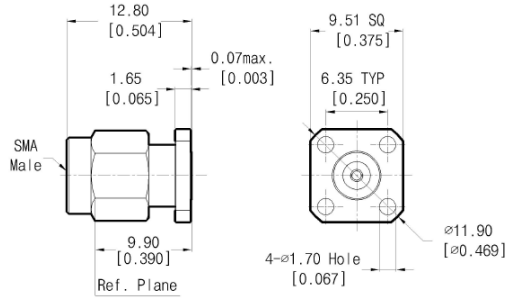
■ Drawing_ High Performance SMA Plug (Male)

4 Hole (12.7 mm SQ)



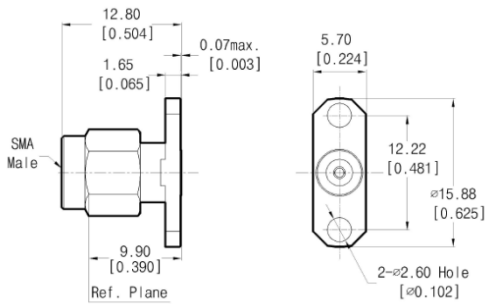
Accept Pin Dia.	Part No.
0.036”	PM06MS035

4 Hole (9.51 mm SQ)



Accept Pin Dia.	Part No.
0.036”	PM06MS040

2 Hole (15.88 mm Long)



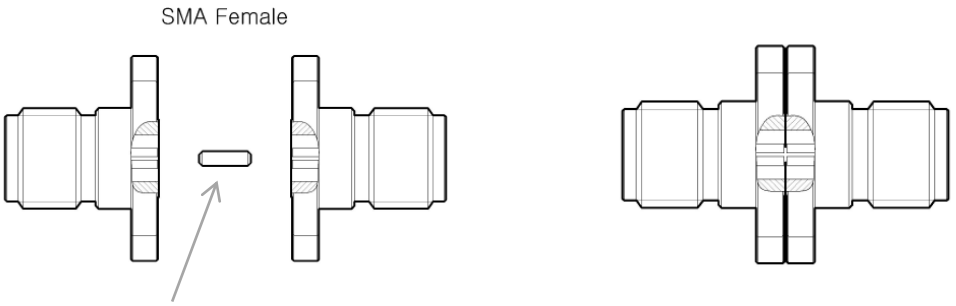
Accept Pin Dia.	Part No.
0.036”	PM06MS045

Test Result

Back-to-Back Test

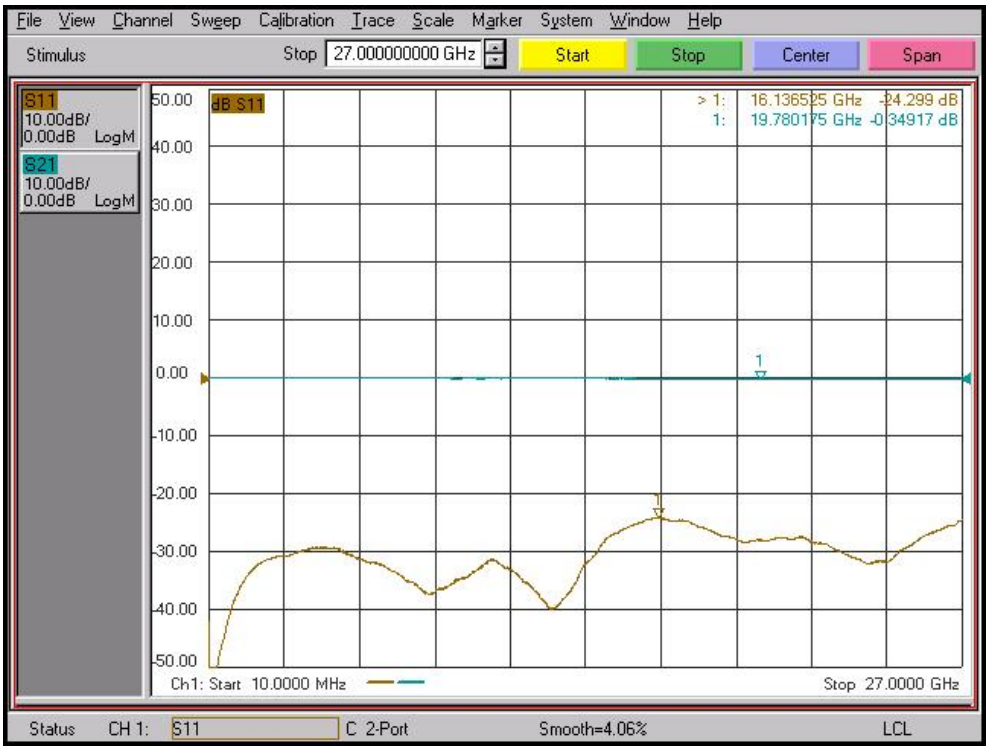
Female Type

Part No : PM06FS035



0.036 inch accept pin

- Freq. Range : 10 MHz ~27 GHz
- Insertion & Return Loss Measurement

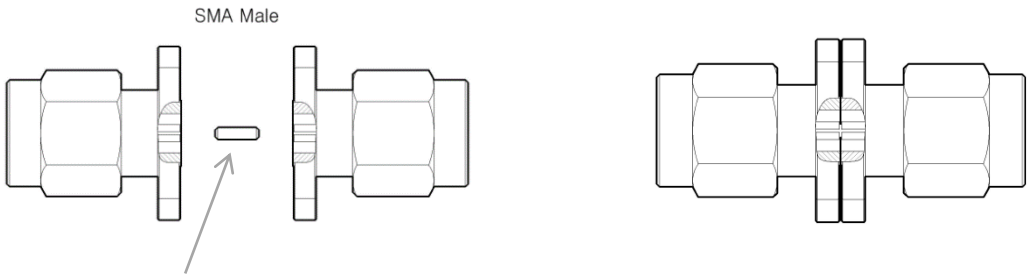


Test Result

Back-to-Back Test

Male Type

Part No : PM06MS035



0.036 inch accept pin

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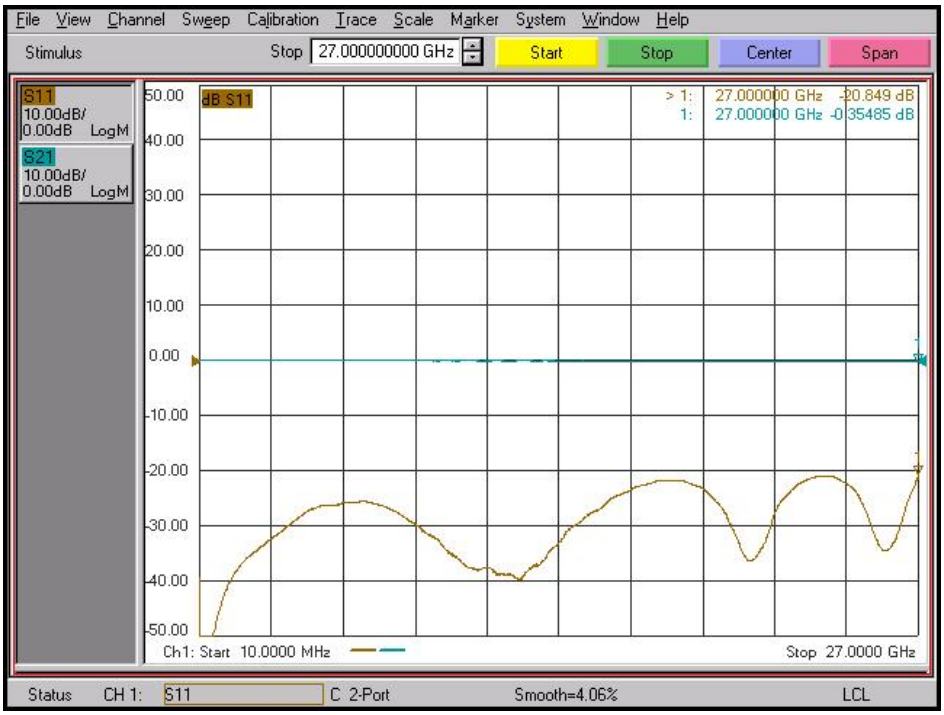

Competitive cross-Reference

Southwest P/N	Withwave P/N
212-503SF	PM06FS035
212-513SF	PM06FS040
214-503SF	PM06FS045
211-503SF	PM06MS035
211-513SF	PM06MS040
213-503SF	PM06MS045

Revision History

Revision	Date	Changes
Ver 1.0	2016-04-05	Released High Performance SMA
Ver.1.1	2020-01-01	Updated Drawing
Ver 2.0	2020-03-01	Add Design Assistance for ANSYS HFSS 3D simulation model