

Withwave's SMP/SMPM/SMPS Cable Assemblies with FX180 cable are designed to provide reliable, high-performance interconnection solutions for High-Speed Testing, Surface Mount Interconnection, and Telecommunication applications.

In addition, Withwave offers SMP/SMPM/SMPS connectors and cable assemblies for semiconductor test systems, including Automated Test Equipment (ATE). Customized cable lengths and connector configurations are available to satisfy diverse customer requirements, ensuring optimized performance across a wide range of applications.

■ Features

- Push-on and Snap-on for Quick Installation
- High speed Interconnection Test
- Flexible RF cable(FX180)

■ Application

- Telecommunication Systems
- High Speed Applications
- Semiconductor ATE Test boards & Fixtures
- Interface Boards



■ Cable Specification

Scope	Specification	FX180
Electrical	Freq. Range (Max)	40 GHz
	Impedance (Ohm)	50
	Velocity of propagation(%)	Typical 82
	Shielding Effectiveness (dB)	-90
Physical	Center Conductor (mm)	0.50
	Insulator (mm)	1.32
	Outer Conductor 1 (mm)	1.48
	Outer Conductor 2 (mm)	1.70
	Jacket (mm)	1.85
Mechanical & Environmental	Weight (g/M)	5
	Temperature	-40 ~+85 °C **

■ Specification (Connectors)

Scope	Specification	SMP R/A	SMPM ST.	SMPM B/H	SMPS R/A
Electrical	Operation Freq. (GHz)		40		18
	Impedance (Ohm)			50	
	VSWR		1.5 @ 18 GHz 1.5 @ 40GHz		
Material	Body		BeCu (Gold Plated) Brass (Gold Plated) Stainless steel (Passivated) (*SMPM B/H)		
	Center Contact		BeCu (Gold Plated)		
	Dielectric			PTFE	

* RoHS Compliant

FX180 Cable Assemblies

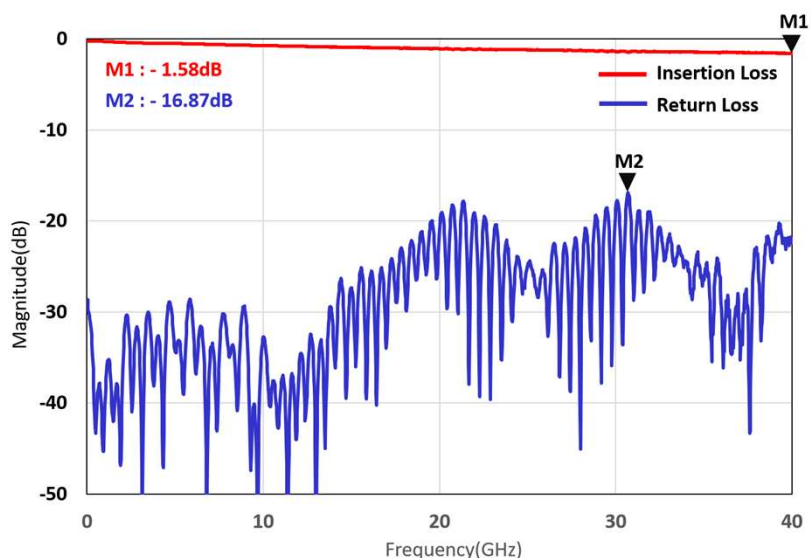
SMP/SMPPM/SMPS (18 & 40 GHz)

withwave
Next Generation Connectivity

Test Results

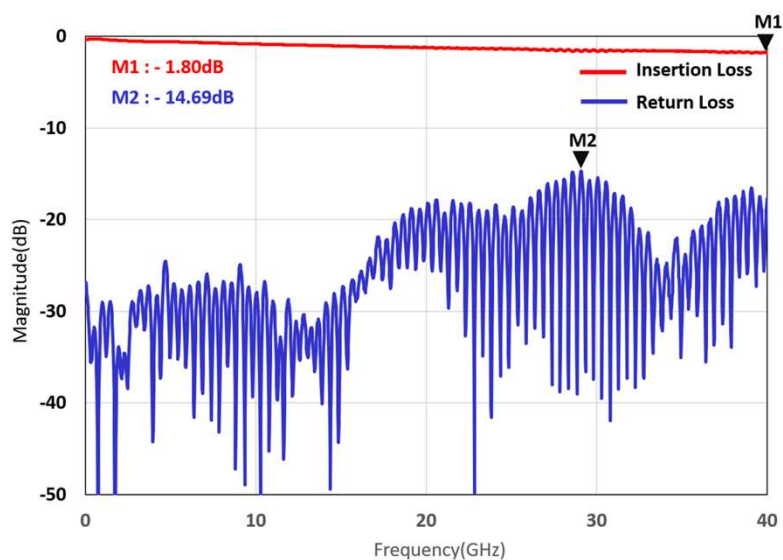
Part No. : FX180-PF12PF13-8inch

- Frequency : 10 MHz to 40 GHz
- Connector : SMPPM(Female) Straight
: SMP(Female) Right Angle
- Cable Length : 8 inch



Part No. : FX180-PF17PF13-10inch

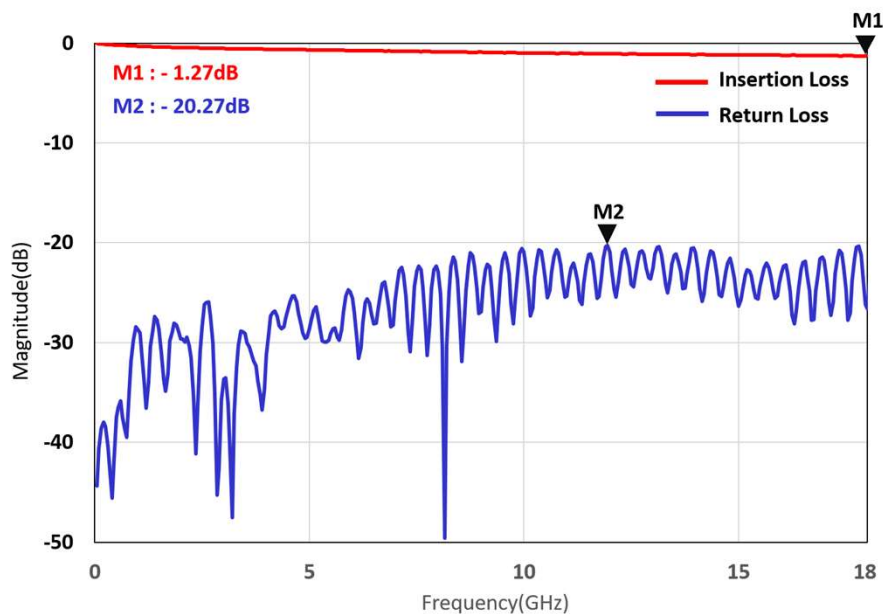
- Frequency : 10 MHz to 40 GHz
- Connector : SMPPM(Female) Bulk Head
: SMP(Female) Right Angle
- Cable Length : 10 inch



Test Results

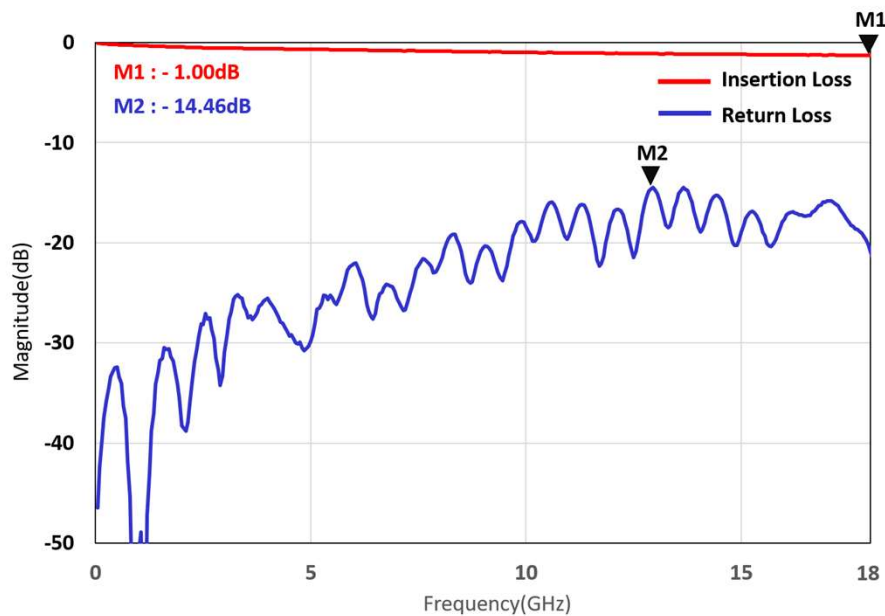
Part No. : FX180-PF16PF12-12inch

- Frequency : 50 MHz to 18 GHz
- Connector : SMPS(Female) Right Angle
: SMPM(Female) Straight
- Cable Length : 12 inch



Part No. : FX180-PF16PF17-6inch

- Frequency : 50 MHz to 18 GHz
- Connector : SMPS(Female) Right Angle
: SMPM(Female) Bulk Head
- Cable Length : 6 inch



■ Selection Guide

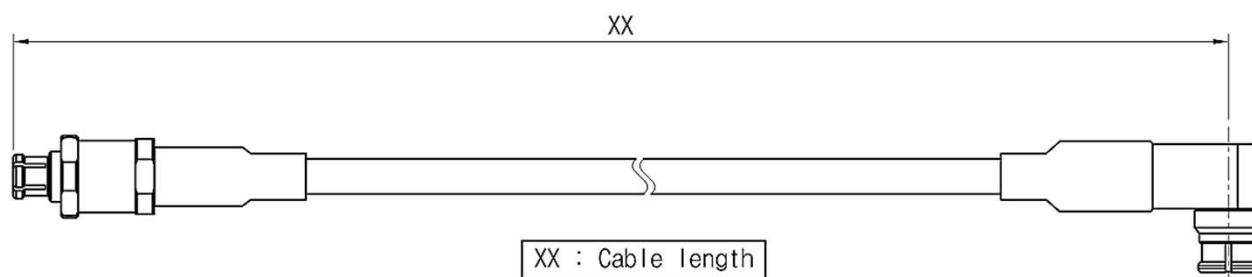
FX180-PF12PF13-10inch

Cable Type
FX180

Cable Length
Unit : inch
mm

Connector Type

PF13 : SMP(Female) : Right Angle
PF12 : SMPM(Female) : Straight
PF17 : SMPM(Female) : Bulk Head
PF16 : SMPS(Female) : Right Angle



SMP(F) R/A Connector(40 GHz)



SMPM(F) Bulk Head Connector(40 GHz)



SMPM(F) S/T Connector(40 GHz)



SMPS(F) R/A Connector(18 GHz)



FX180 Cable Assemblies

SMP/SMPPM/SMPS (18 & 40 GHz)



■ Revision History

Revision	Date	Changes
Ver 1.0	2026-08-01	Released SMP/SMPPM/SMPS FX180 Cable Assembly