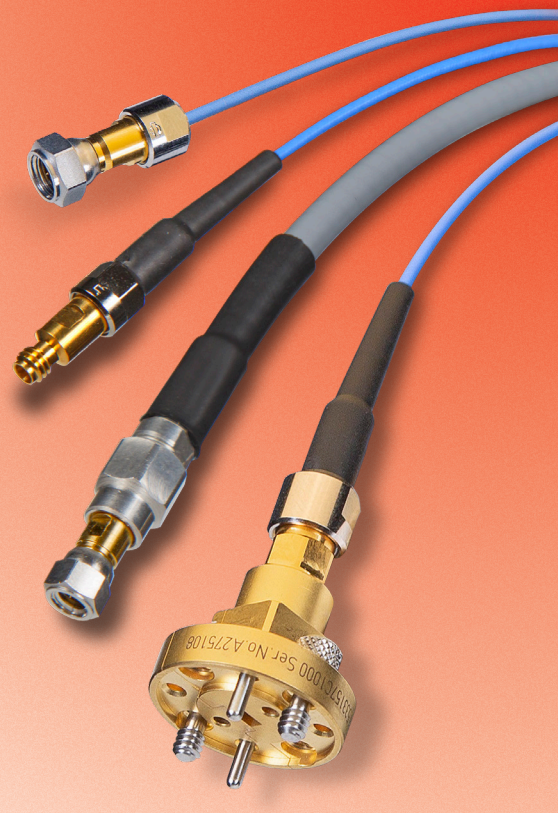
STORM FLEX®

SF047EW

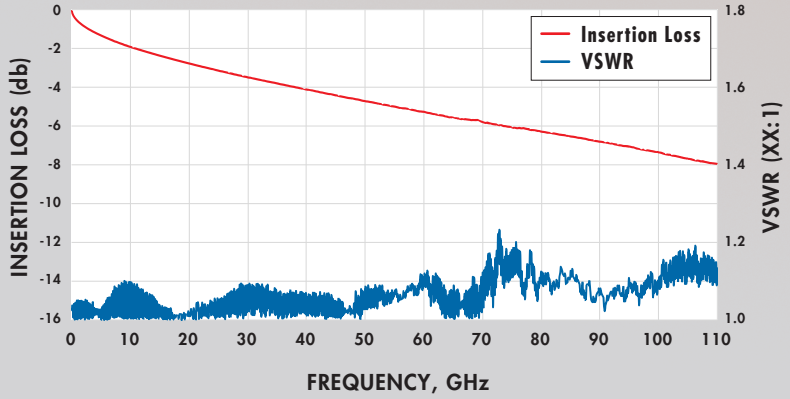


E- AND W-BAND TEST ASSEMBLY

An SF047EW assembly offers test engineers, application designers, manufacturers of mmWave applications the proven durability and robustness of Storm Flex® 047 cable, optimized for coaxial connectivity at frequencies up to 110 GHz.

SF047EW cable can withstand handling and flexing and while maintaining the original Insertion Loss and VSWR performance at frequencies previously addressed by waveguides.

Typical VSWR and Insertion Loss for SF047EW, 18 in, with 1.0 mm Plugs



FEATURES	BENEFITS
~ *Solid PTFE dielectric*	~ *High compression resistance and greater durability*
~ *Ultra-high strength outer braid*	~ *Eliminates cable breakage associated with repeated bending and handling*
~ *Optimized for use in E and W bands*	~ *E-band connectivity using 1.35mm connectors and W-band connectivity using 1.00mm connectors*
~ *Interconnect Configurations*	~ *Eliminates the need for waveguides in applications such as robotics, autonomous driving and bio-snesing.*
~ *Rear boot for connector*	~ *In test lab applications, boot protects against behind-the-connector cable damage*
~ *Optional armor*	~ *Allows all configurations to be used as VNA test leads or in harsher environments*

MARKETS SERVED

T&M RADAR TELECOM INDUSTRY

TELEDYNE
STORM MICROWAVE
Everywhereyoulook™

High value microwave and electronic interconnect solutions

www.teledynestorm.com

STORM FLEX®

SF047EW

E- AND W-BAND TEST ASSEMBLY

■ ORDERING INFORMATION: Part Number Designation

ARMORING DESIGNATOR	CABLE DESIGNATOR	CONNECTOR COMBINATION PART NUMBER	ASSEMBLY LENGTH * IN INCHES
[ ]	905	– SEE TABLES	– SEE EXAMPLES

ARMORING DESIGNATOR

Leave Blank for Unarmored
R Ruggedized Boot Option
A Hard Armored

EXAMPLES:

905-4243-**012** = Storm Flex® 047EW, 1.00 mm SP to 1.00 mm SJ (assembly operates to 110 GHz), **12 inches, *Standard Low-profile Connector Option***

R905-5151-**012** = Storm Flex® 047EW, 1.35 mm SP to 1.35mm SP (assembly operates to 110 GHz), **12 inches, *Ruggedized Boot Option***

A905-4242-**018** = Storm Flex® 047EW, 1.00 mm SP to 1.00 mm SP (assembly operates to 110 GHz), **18 inches, *Hard Armored Option***

** Max assembly length is 48 in/1.219 m*
Min assembly length is 4 in/0.101 m
Min assembly length for R and A is 6 in/0.154 m

■ CONNECTOR COMBINATION PART NUMBERS

CONNECTOR OPERATING FREQUENCY

		110 GHz		90 GHz		60-90 GHz
		1.0 mm SP	1.0 mm SJ	1.35 mm SP	3.5 mm SJ	WR12 WG
110 GHz	1.0 mm SP	4242	4243	4251	4252	4261
	1.0 mm SJ	4243	4343	4351	4352	4361
90 GHz	1.35 mm SP	4251	4351	5151	5152	5161
	1.35 mm SJ	4252	4352	5152	5252	5261
60-90 GHz	WR12 WG	4261	4361	5161	5261	6161

A mating torque value of 4 in-lbs/0.45 Nm is recommended for the 1.0 mm interface.

A mating torque value of 8 in-lbs/0.9 Nm is recommended for the 1.35 mm interface

Call Teledyne Storm Microwave for WR-10 & WR-15 connector options.

SPECIFICATIONS		STORM FLEX® 047EW
Cable Designator		**905**
Diameter (in/mm)		0.059/1.50
Max Frequency (GHz)		110
Attenuation–Nominal @ 67 GHz (dB/ft)		3.70
Attenuation–Nominal @ 90 GHz (dB/ft)		4.38
Attenuation–Nominal @ 110 GHz (dB/ft)		4.93
VSWR	Typ @ 110 GHz w/1.00mm	1.25:1
	Max @ 110 GHz w/1.00mm	1.40:1
	Typ @ 90 GHz w/1.35mm	1.25:1
	Max @ 90 GHz w/1.35mm	1.40:1
Shielding Effectiveness (dB, 0-18 GHz)		> 90
Minimum Centerline Bend Radius (in/mm), static		0.10/2.54
Compression Resistance - cable only (lbs./in, kg/cm)		100 / 17.9
Connector Retention (lbs)		5.0
Weight (grams/ft & /m)		1.61/5.28
Operating Temperature Range (°C)		–40 to +70

Insertion loss stability verified per VDI/VDE/DGQ/DKD 2622 Part 19.
Specifications subject to change without notice.
StormFlex® 047EW is RoHS compliant.

CONNECTOR CODES	
SP	Straight Plug
SJ	Straight Jack
WG	Waveguide

MARKETS SERVED

T&M RADAR TELECOM INDUSTRY

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