

RF Connectors

LK Mechanical Lock

H Offered as harness

Click on each product information to jump to the web.

Product Name		MHF® I LK	MHF® I		MHF® 4L LK	MHF® 4L			MHF® 4
Appearance									
Feature		MHF® I with Mechanical lock	Low Insertion Loss	Industry standard Most cable options	MHF® 4L with Mechanical lock	Low Insertion Loss and VSWR	Industry Standard for M.2	Industry Standard for M.2	Low profile 1.2 mm
Part Number	Plug	20278-112R-** 20351-112R-37 (O.D. 1.37 mm)	20767-001R-20	20278-112R-** 20351-112R-37 (O.D. 1.37 mm)	20632-001R-37	20632-001R-37	20565-001R-13	20572-001R-08	20611-001R
	Receptacle	20279-001E-03 (3 pads) / 20441-001E-01 (4 pads)			20449-001E-03 (MHF® 4) / 20579-001E (MHF® 4L)				
Mated Height		2.9 mm max.	3.0 mm max.	2.5 mm max.	2.0 mm max.	1.7 mm max.	1.4 mm max.	1.2 mm max.	1.2 mm max.
SMT Size		3.1 x 3.0 mm	3.1 x 3.0 mm	3.1 x 3.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm
Cable Size (Micro-coaxial) (O.D. to AWG)	3.0 mm	-	-	-	-	-	-	-	-
	2.8 mm	-	-	-	-	-	-	-	-
	2.0 mm	-	AWG 26	-	-	-	-	-	-
	1.8 mm	AWG 30	-	AWG 30	-	-	-	-	-
	1.37 mm	AWG 30	-	AWG 30	AWG 30	AWG 30	-	-	-
	1.32 mm	AWG 32	-	AWG 32	-	-	-	-	-
	1.13 mm	AWG 32	-	AWG 32	-	-	AWG 32	-	-
	0.95 mm	-	-	-	-	-	AWG 33	-	-
	0.81 mm	AWG 36	-	AWG 36	-	-	-	AWG 36	AWG 36
	0.64 mm	-	-	-	-	-	-	AWG 36	-
	0.48 mm	-	-	-	-	-	-	-	-
Frequency Range		Up to 9 GHz	Up to 9 GHz	Up to 9 GHz	Up to 12 GHz (MHF® 4L receptacle) Up to 9 GHz (MHF® 4 receptacle)	Up to 12 GHz (MHF® 4L receptacle) Up to 9 GHz (MHF® 4 receptacle)	Up to 12 GHz (MHF® 4L receptacle) Up to 9 GHz (MHF® 4 receptacle)	Up to 12 GHz (MHF® 4L receptacle) Up to 9 GHz (MHF® 4 receptacle)	Up to 9 GHz
VSWR (Harness only)	DC to 3 GHz	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.3 max.
	3 to 6 GHz	1.5 max.	1.5 max.	1.5 max.	1.4 max.	1.4 max.	1.45 max.	1.45 max.	1.5 max.
	6 to 9 GHz	1.6 max. (O.D.1.32 mm) 1.9 max. (O.D.0.81, 1.13, 1.37, 1.8 mm)	1.6 max.	1.6 max. (O.D.1.32 mm) 1.9 max. (O.D.0.81, 1.13, 1.37, 1.8 mm)	1.5 max.	1.5 max.	1.6 max.	1.6 max.	2.0 max.
	9 to 12 GHz	-	-	-	1.6 max.	1.6 max.	1.9 max.	1.9 max.	-
Operating Temperature		-40 to 90°C (233 to 363 K) *	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K) *	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)

(*) Please contact us for higher temperature connectors.

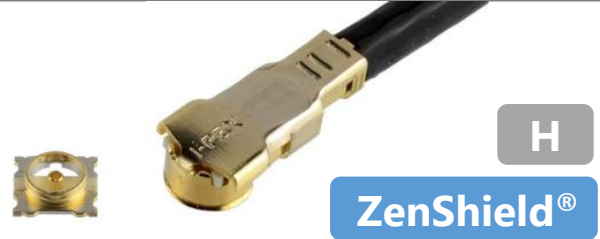
RF Connectors

LK Mechanical Lock

H Offered as harness

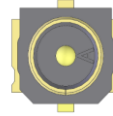
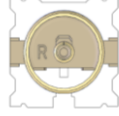
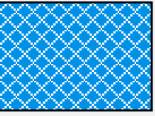
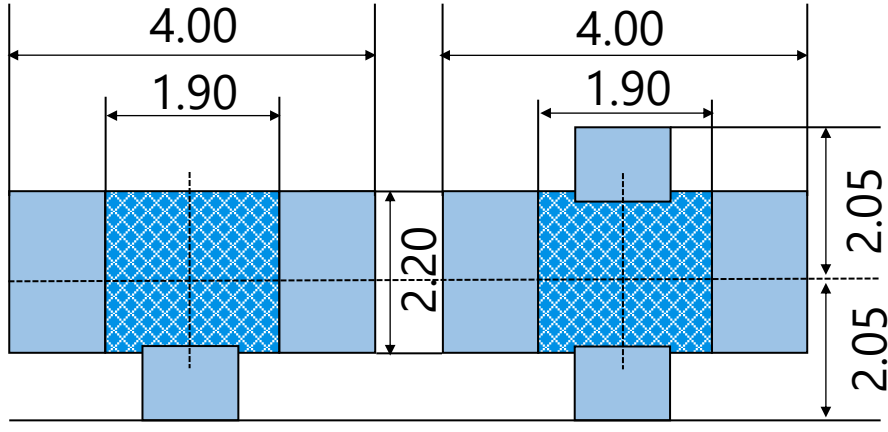
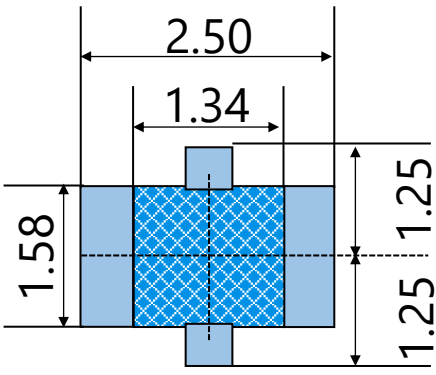
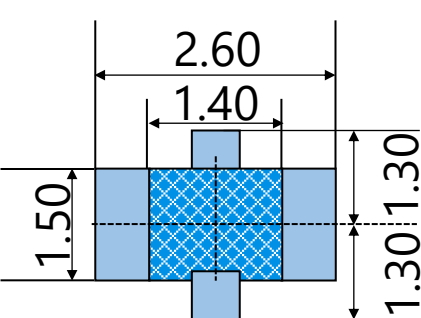
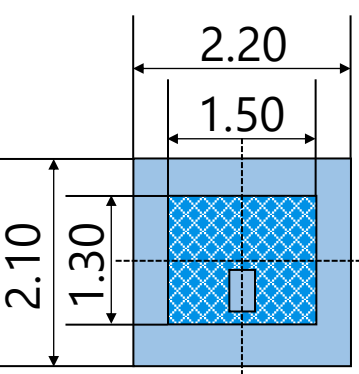
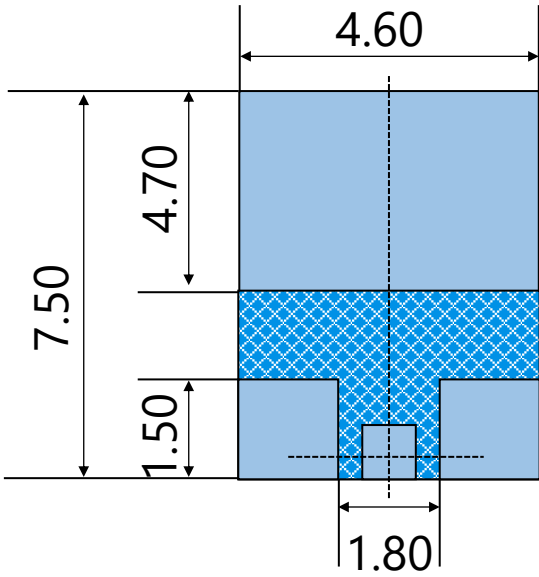
ZenShield® Full EMI Shield

Click on each product information to jump to the web.

Product Name		MHF® 5L		MHF® 5		MHF® 7S	MHF® -TI
Appearance		 H	 H	 H	 H	 H ZenShield®	 LK H
Feature		Low insertion Loss and VSWR through 15 GHz	Low Insertion Loss and VSWR through 15 GHz	Low profile 1.0 mm	Low profile 1.0 mm	Excellent EMC performance with fully-shielded design	Robust design for automotive telematics antenna and camera sensors
Part Number	Plug	20668-001R-13	20714-001R-81	20711-001R-81	20615-002R-48	20980-001R-13	20859-001R-01
	Receptacle	20566-001E-01	20566-001E-01	20566-001E-01	20566-001E-01	20981-001E-02	20860-001E-01
Mated Height		1.3 mm max.	1.3 mm max.	1.0 mm max.	1.0 mm max.	1.4 mm max.	3.65 mm max.
SMT Size		2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	2.0 x 2.0 mm	9.4 x 5.18 mm
Cable Size (Micro-coaxial) (O.D. to AWG)	3.0 mm	-	-	-	-	-	AWG 25
	2.8 mm	-	-	-	-	-	AWG 26
	2.0 mm	-	-	-	-	-	-
	1.8 mm	-	-	-	-	-	-
	1.37 mm	-	-	-	-	-	-
	1.32 mm	-	-	-	-	-	-
	1.13 mm	AWG 32	-	-	-	AWG 32	-
	0.95 mm	-	-	-	-	-	-
	0.84 mm	-	AWG 33	-	-	-	-
	0.81 mm	-	-	AWG 36	-	-	-
	0.64 mm	-	-	AWG 36	-	-	-
	0.48 mm	-	-	-	AWG 38	-	-
Frequency Range		Up to 15 GHz	Up to 15 GHz	Up to 12 GHz	Up to 12 GHz	Up to 15 GHz	Up to 6 GHz
VSWR (Harness only)	DC to 3 GHz	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.3 max.	1.5 max.
	3 to 6 GHz	1.4 max.	1.4 max.	1.5 max.	1.5 max.	1.35 max.	1.5 max.
	6 to 9 GHz	1.5 max.	1.5 max.	1.6 max.	1.6 max.	1.4 max.	-
	9 to 12 GHz	1.5 max.	1.5 max.	1.8 max. (O.D.0.64 mm) 1.7 max. (O.D.0.81 mm)	1.6 max.	1.45 max.	-
	12 to 15 GHz	1.6 max.	1.6 max.	-	-	1.5 max.	-
Operating Temperature		-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 105°C (233 to 378 K)
Automotive Standards		-	-	-	-	-	USCAR-2 *

(*) Rev.6 - 5.4.6 (Vibration), 5.6.1 (Thermal Shock), 5.6.2 (Temp. & Humidity Cycle), 5.6.3 (High Temp. Exposure & Life) evaluation passed.

RF Connectors : Footprint pattern

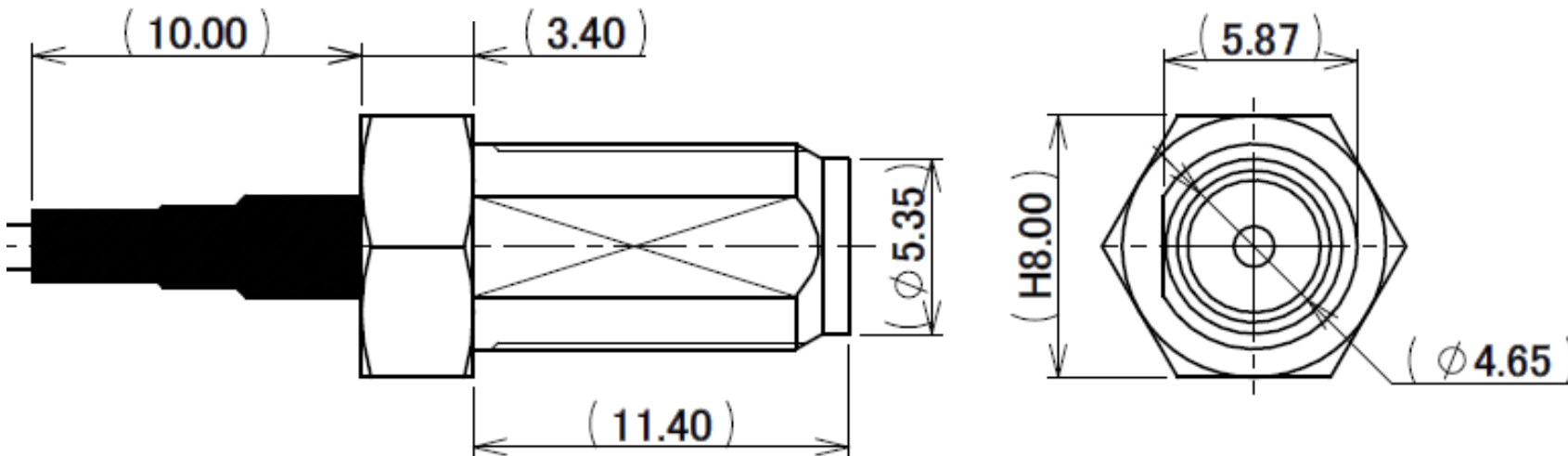
Product Name	MHF® I LK	MHF® I		MHF® 4L LK	MHF® 4L			MHF® 4	MHF® 5L	MHF® 5	MHF® 7S	MHF® -TI
Plug Appearance												
Mating Height (Max.)	2.9 mm	3.0 mm	2.5 mm	2.0 mm	1.7 mm	1.4 mm	1.2 mm	1.2 mm	1.3 mm	1.0 mm	1.4 mm	3.65 mm
Rece Appearance	 MHF® I (3 pads) MHF® I (4 pads)			 MHF® 4L MHF® 4			 MHF® 5/5L		 MHF® 7S		 MHF® -TI	
Footprint Pattern (Reference) No ground, signal, resist in this area 	 3 pads 4 pads											

RF Connectors : MHF-SMA harness

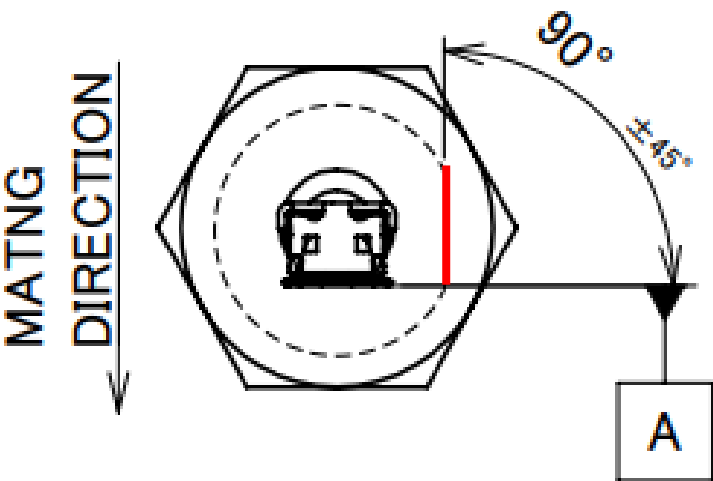
LK Mechanical Lock

H Offered as harness

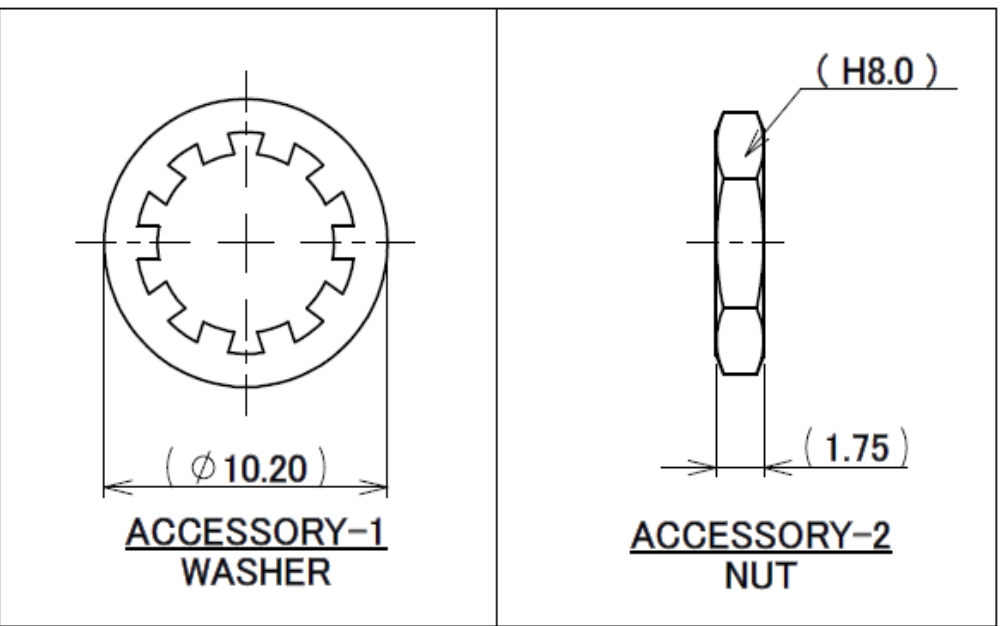
Click on each product information to jump to the web.

Product Name		MHF® I LK - SMA Jack harness	MHF® I - SMA Jack harness	MHF® -SW23 plug - SMA Jack harness
Appearance		 LK H	 H	 H
Feature		MHF® I with Mechanical lock	Industry standard	Mating with switch connector (MHF® -SW23 : 20549-001E)
SMA connector	SMA type	SMA Jack	SMA Jack	SMA Jack
	D-CUT position	90°	90°	90°
	SMA size			
Cable Size (Micro-coaxial) (O.D. to AWG)	1.13 mm	AWG 32	AWG 32	AWG 32
	1.37 mm	AWG 30	AWG 30	-
Frequency Range		Up to 9 GHz	Up to 9 GHz	Up to 9 GHz
VSWR (Harness only)	DC to 3 GHz	1.4 max.	1.3 max.	1.5 max.
	3 to 6 GHz	1.6 max.	1.5 max.	1.6 max.
	6 to 9 GHz	1.9 max.	1.6 max.	2.0 max.
Operating Temperature		-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K)	-40 to 90°C (233 to 363 K) *
Standard harness		Available	Available	Available

D-CUT position
(FLAT AREA ON SCREW (OUTER THREAD) PART OF JACK SMA)



ACCESSORY



RF Connectors : RF Switch / Harness

H Offered as harness

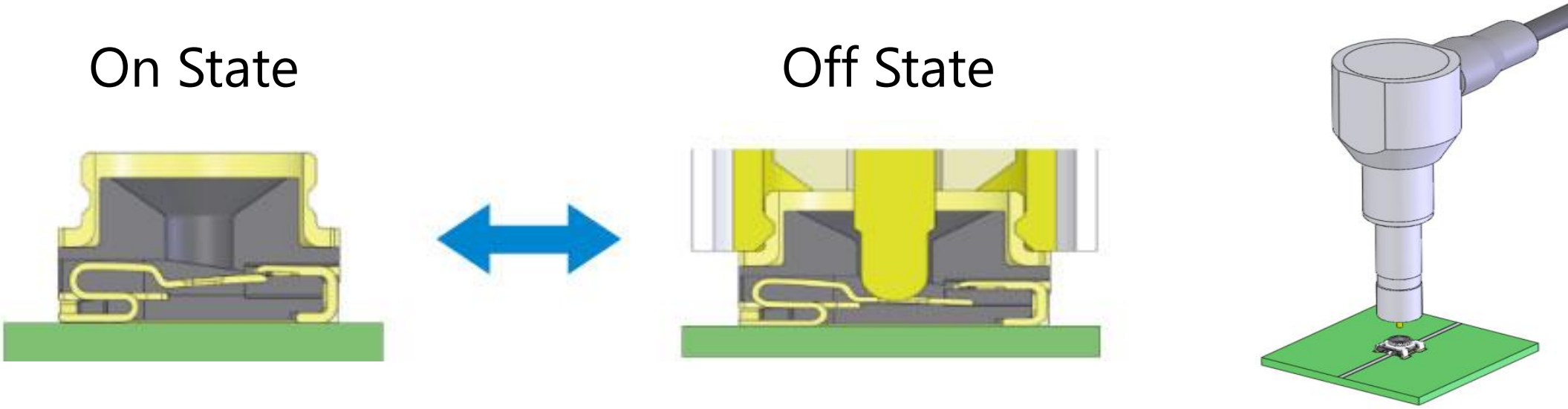
Click on each product information to jump to the web.

Product Name		MHF® -SW23	MHF® -SW23 plug
Appearance			 H
Feature		Contaminant discontinuity resistant design 2.3 x 2.3 mm footprint	Mating with switch connector (20549-001E)
Part Number		20549-001E	20851-001R
Height		Height : 1.35 mm	Mated height : 3.7 mm max.
SMT Size		2.3 x 2.3 mm	2.3 x 2.3 mm
Cable Size (Micro-coaxial) (O.D. to AWG)		-	1.13 mm AWG 32
Frequency Range		Up to 11 GHz	Up to 9 GHz
VSWR		DC to 2.5 GHz : 1.2 max.	0.3 to 3 GHz : 1.4 max.
		2.5 to 6 GHz : 1.3 max.	3 to 6 GHz : 1.6 max.
		6 to 11 GHz : 1.5 max.	6 to 9 GHz : 2.0 max.
Insertion Loss	DC to 2.5 GHz	0.15 dB max.	-
	2.5 to 6 GHz	0.2 dB max.	-
	6 to 11 GHz	0.4 dB max.	-
Isolation	DC to 3 GHz	20.0 dB min.	-
	3 to 6 GHz	15.0 dB min.	-
	6 to 11 GHz	12.0 dB min.	-
Operating Temperature		-40 to 85°C (233 to 358 K)	-40 to 85°C (233 to 358 K)

[MHF-SW23 plug - SMA Jack harness available](#)

SMA Adapters for MHF® Switch

Type	Cable probe	High cycle series	
	Friction lock	Standard probe	Floating probe
Appearance (Reference)			
Durability (cycles)	1,000	10,000	200,000
MHF® -SW23	90582-0300 (Cable: 300 mm) 90582-0400 (Cable: 400 mm)	90604-0001	90605-0001



RF Accessories : Adapters

Adapters for MHF[®] Plugs

Type	For electrical performance check		For voltage check
Appearance (Reference)			
Durability (cycles)	3,000		10,000
MHF [®] I, I LK Plug	90193-001	-	90194-001
MHF [®] 4, 4L, 4L LK Plug	-	90449-001	90449-003-01
MHF [®] 5, 5L Plug	90543-0001	-	90586-0002
MHF [®] 7S Plug	-	91255-0001	91245-0001

SMA Adapters for MHF[®] Receptacles

Type	Standard	For electrical performance check				
		High cycle series				
		Standard type	Narrow pitch type		Detachable	
		Probe	Adapters cable (Attach to probe)	Probe	Adapters base (Attach to probe)	Probe
Appearance (Reference)						
Durability (cycles)	500	10,000	100	10,000	200,000	10,000
MHF [®] I Receptacle	90193-002	90539-001	90577-0100 (Cable: 100 mm)	90575-0001	90684-0001	90416-001
MHF [®] 4, 4L Receptacle	90449-002	90698-0001	90577-0200 (Cable: 200 mm)	90576-0001		90683-0001
MHF [®] 5, 5L Receptacle	90543-0002	90793-0001	90577-0350 (Cable: 350 mm)	90847-0001		90690-0001
			90577-0750 (Cable: 750 mm)			
MHF [®] 7S Receptacle	91256-0001	-	91197-300P 91197-300J	91136-0001 91145-0001	-	-

RF Accessories : Hand Tool

Type	Insertion/ Extraction tool	Extraction tool	Insertion tool	Insertion/ Extraction tweezer	Unlocking, Extraction tweezer	Locking/Unlocking, Extraction tweezer	Locking/Unlocking, Insertion/ Extraction tweezer		Unlocking tool
Appearance (Reference)									
MHF® I	90224-001 90885-0001 (*1)	90192-001	-	-	-	-	-	-	-
MHF® I LK	-	-	-	-	91026-0001	91492-0001	-	-	-
MHF® 4	90435-001	-	-	90482-001	-	-	-	-	-
MHF® 4L	90609-0001 (*2) 90873-0001 (*3)	-	-	90616-0008 90615-0013	-	-	-	-	-
MHF® 4L LK	-	-	-	-	-	-	91166-0001	91493-0001	-
MHF® 5, 5L	90612-0001	-	90624-0001	-	-	-	-	-	-
MHF® 7S	91186-0001	-	-	-	-	-	-	-	-
MHF® -TI	-	-	-	-	-	-	-	-	91097-0001

Note
(*1): 90885-0001 is for 20767-001R
(*2): 90609-0001 is for 20572-001R-08 and 20565-001R-13
(*3): 90873-0001 is for 20632-001R-37

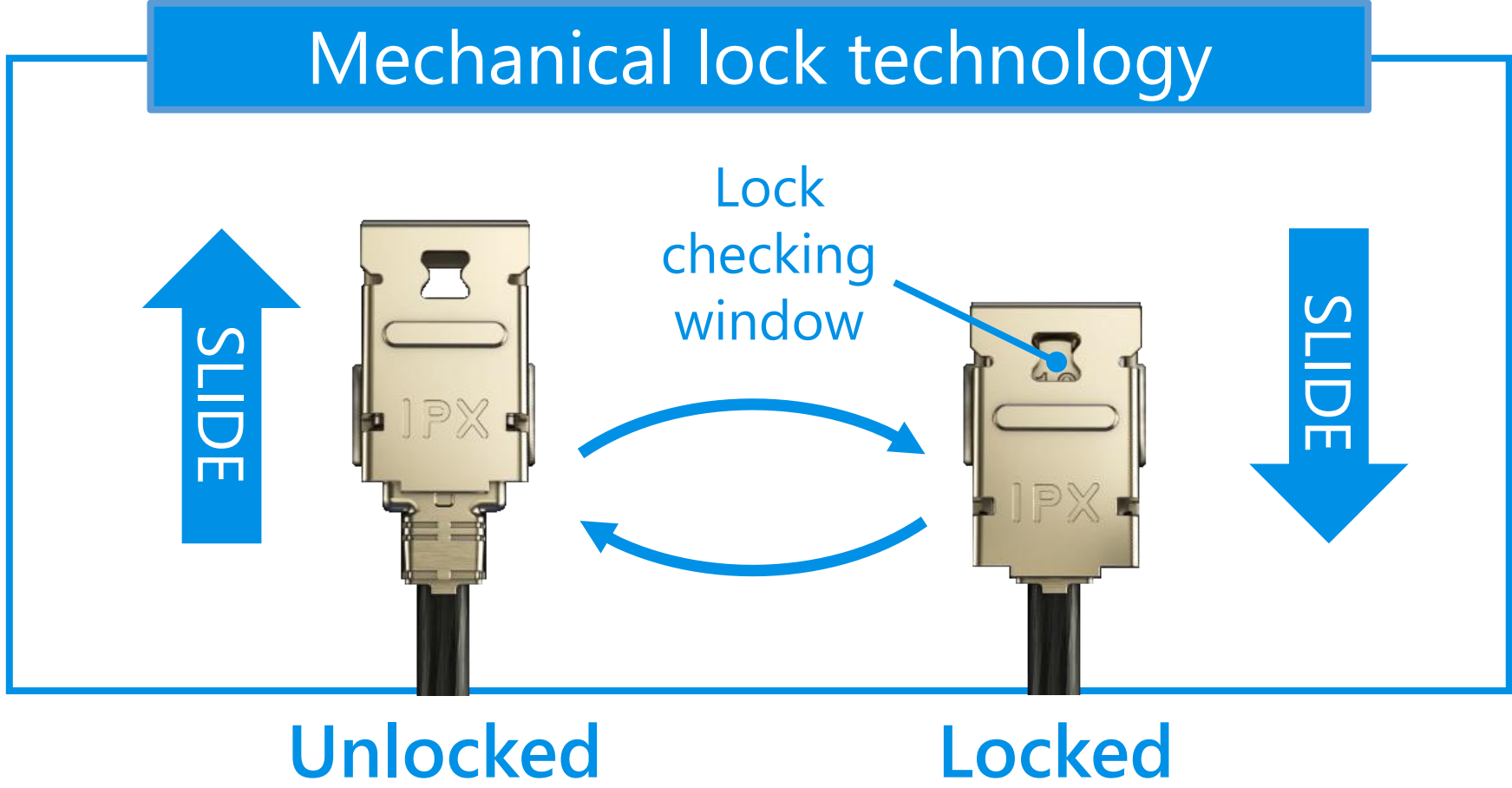


MHF[®] Series

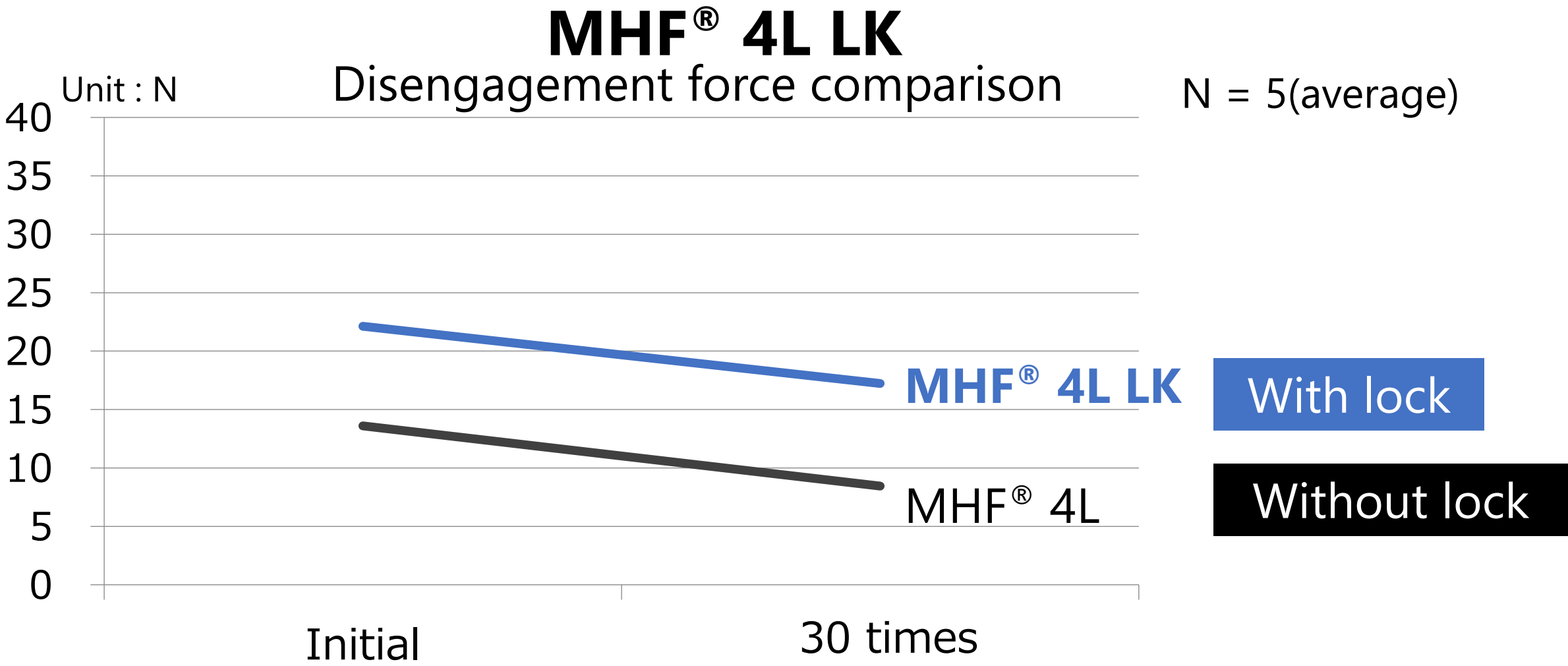
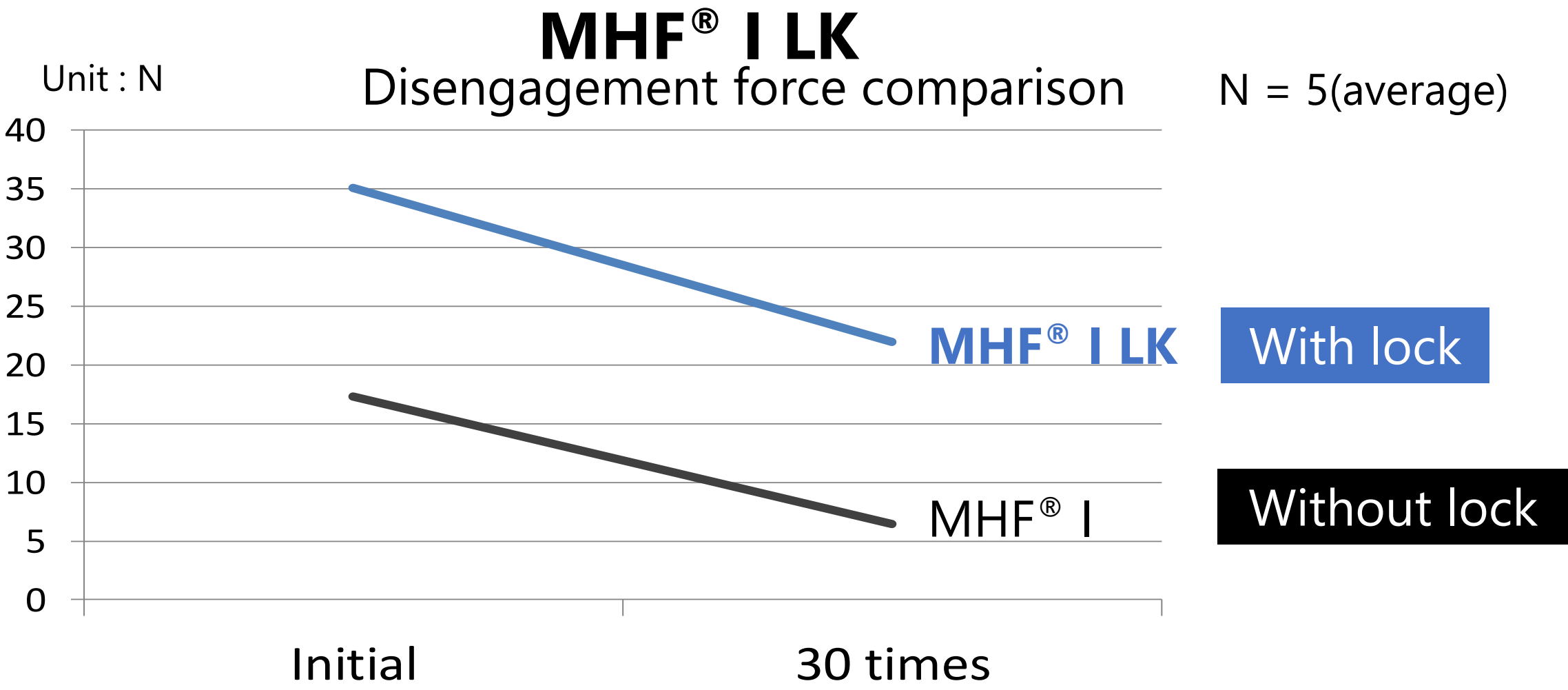
Mechanical lock

MHF® I LK/MHF® 4L LK : Ideal for continuous shock and vibration applications

Locking/Un-Locking Process



Play full [MHF® I LK](#) video

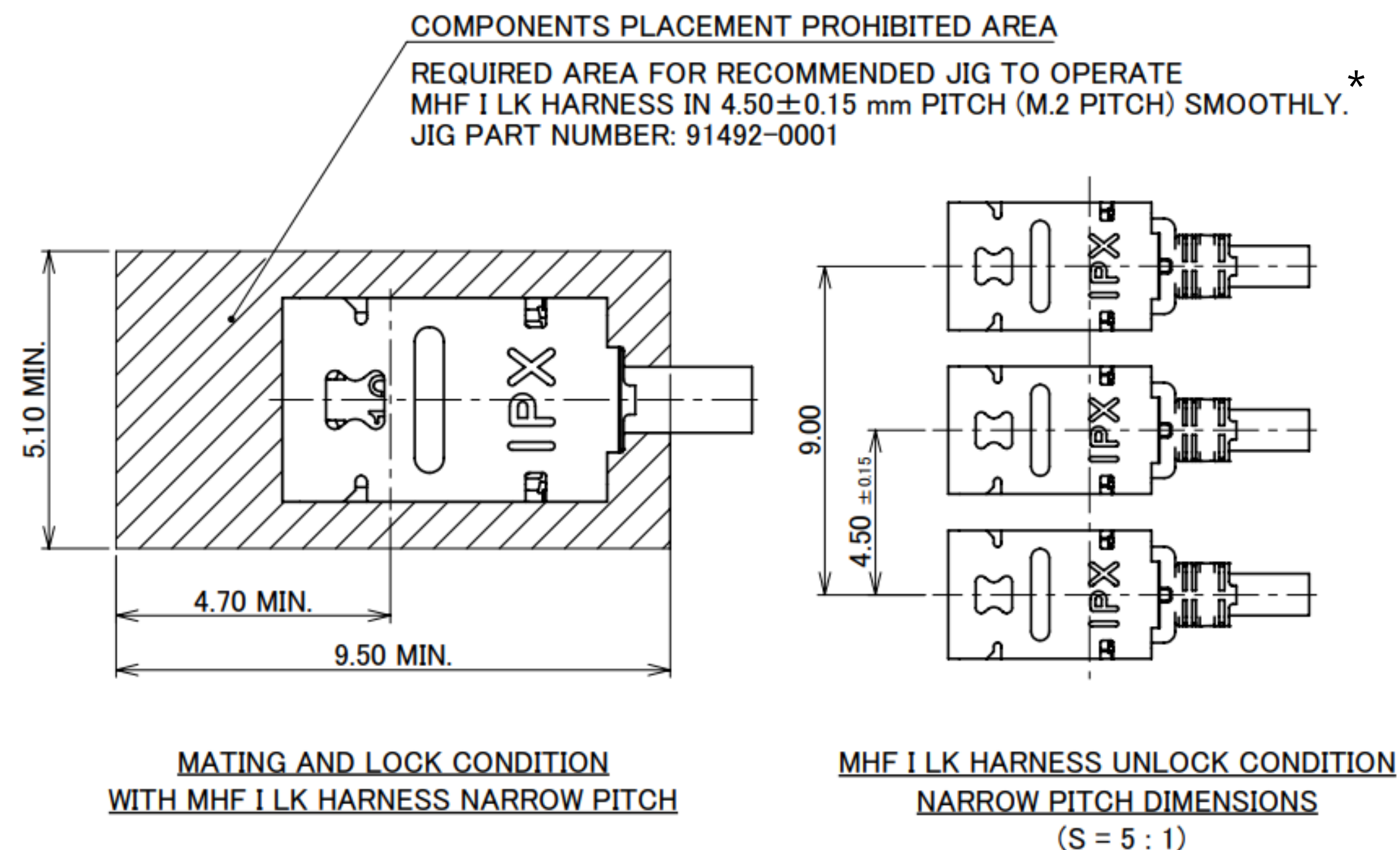


MHF[®] I LK/MHF[®] 4L LK : Component placement prohibited area



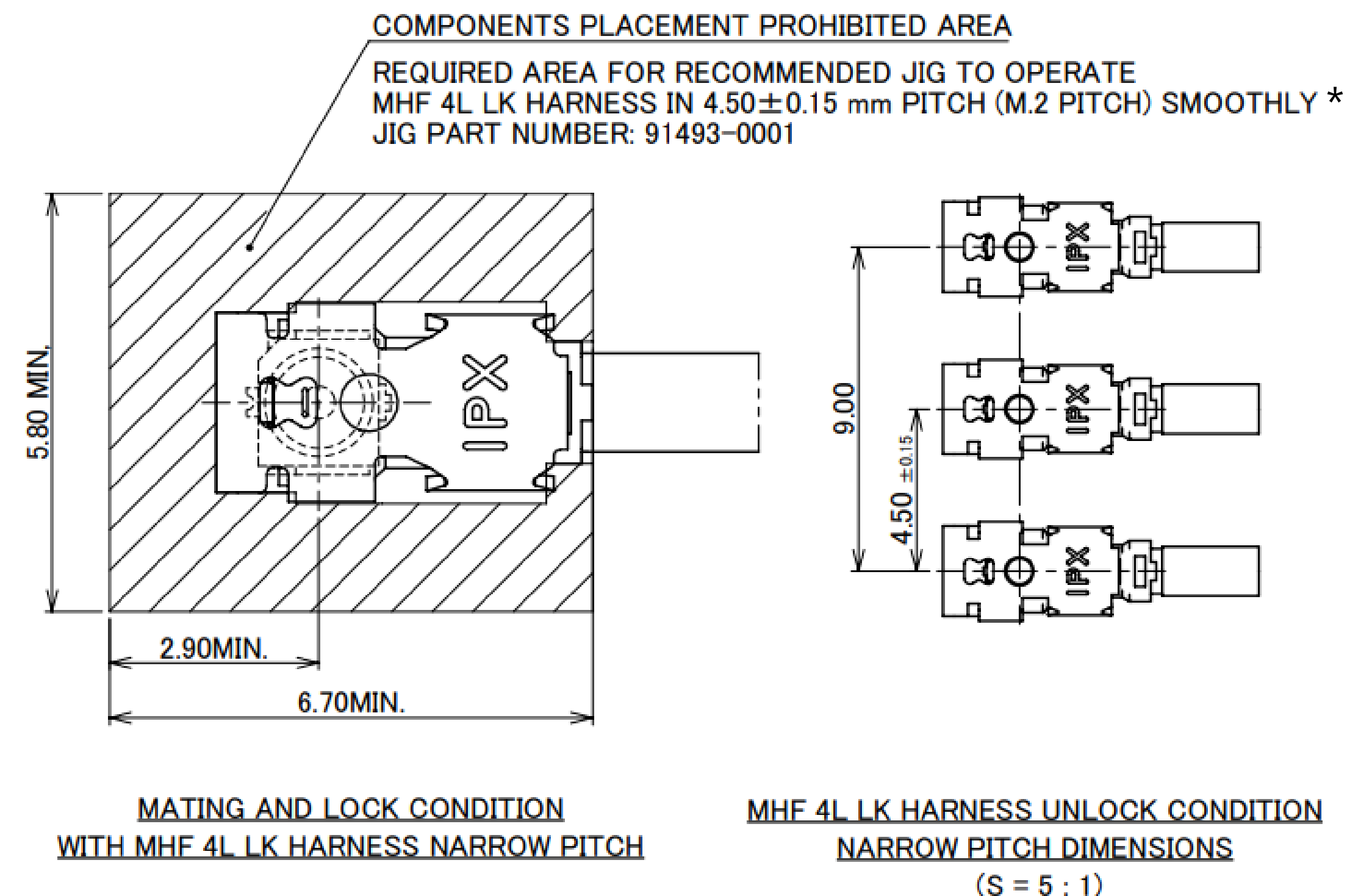
MHF I Receptacle mated with MHF[®] I LK harness

MULTIPLE CONNECTORS LAYOUT



MHF 4L Receptacle mated with MHF[®] 4L LK harness

MULTIPLE CONNECTORS LAYOUT



*4.5 mm pitch is M.2 standard compatible. The clearance for the connector layout is not M.2 standard compatible.

MHF[®]-TI : Small, robust RF connector for automotive

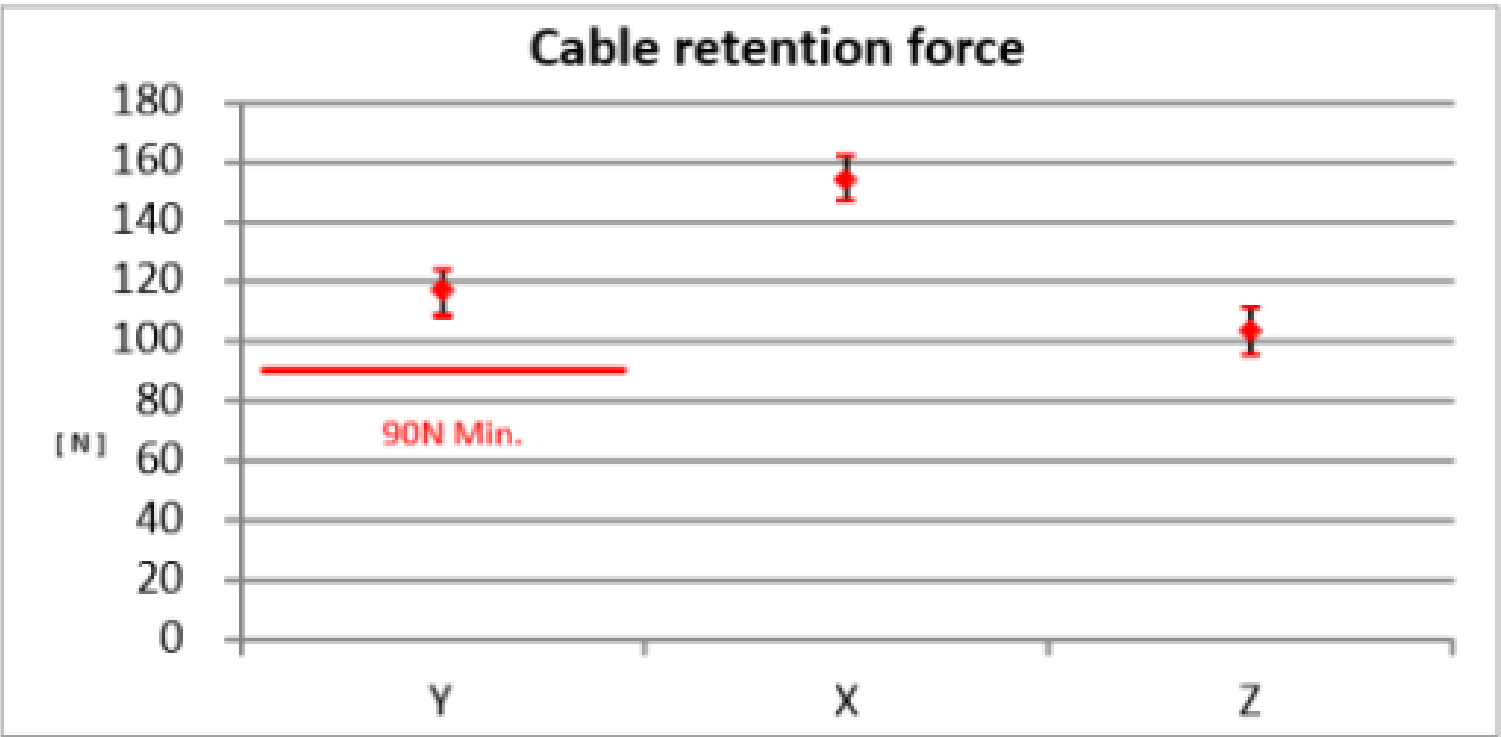
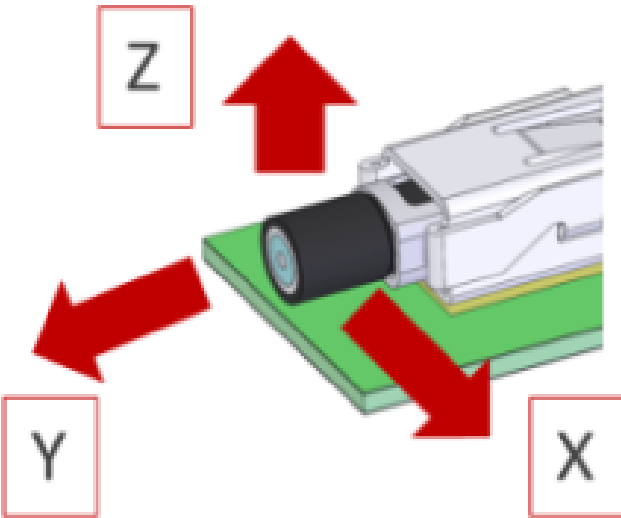
Click on the product information to jump to the web.

H Offered as harness

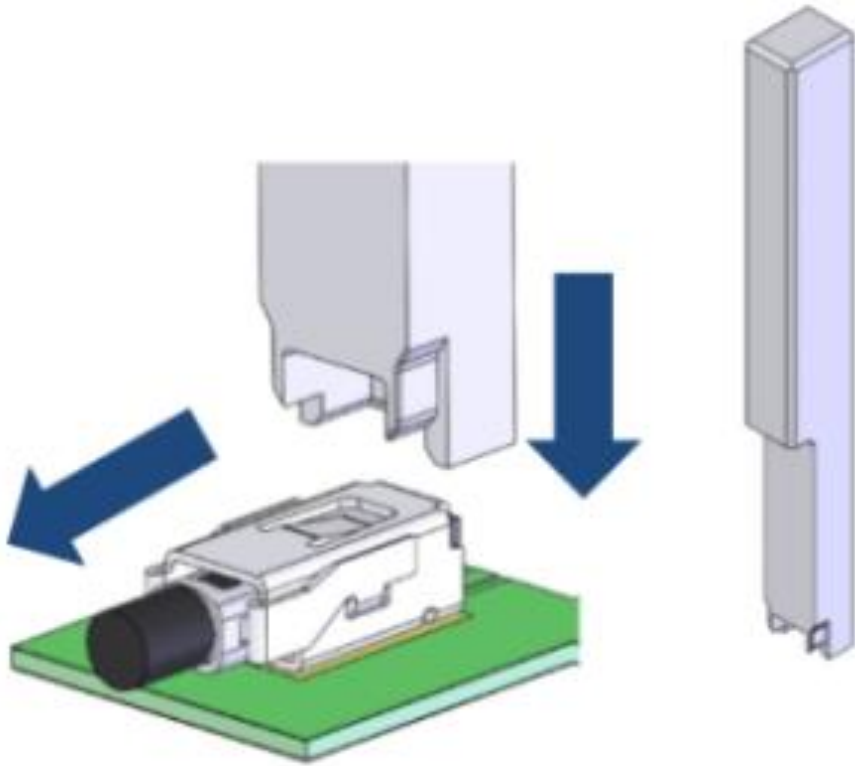
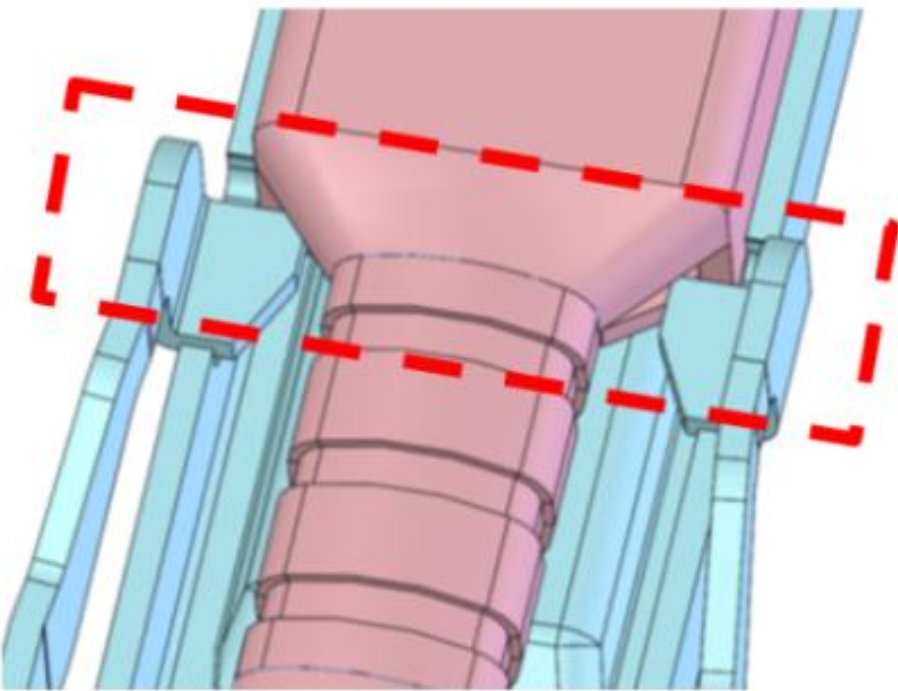
Product Name		MHF [®] -TI
Appearance		 H
Feature		Robust SMT connector for automotive telematics antenna
Part Number	Plug	20859-001R-01
	Receptacle	20860-001E-01
Mated Height		3.65 mm max.
SMT Size		9.4 x 5.18 mm
Cable Size (Micro-coaxial) (O.D. to AWG)	3.0 mm	AWG 25
	2.8 mm	AWG 26
Frequency Range		Up to 6 GHz
VSWR (Harness only)	DC to 6 GHz	1.5 max.
Operating Temperature		-40 to 105°C (233 to 378 K)
Automotive Standards		USCAR-2 *

(*) Rev.6 - 5.4.6 (Vibration), 5.6.1 (Thermal Shock), 5.6.2 (Temp. & Humidity Cycle), 5.6.3 (High Temp. Exposure & Life) evaluation passed.

■ High retention force (90N minimum)



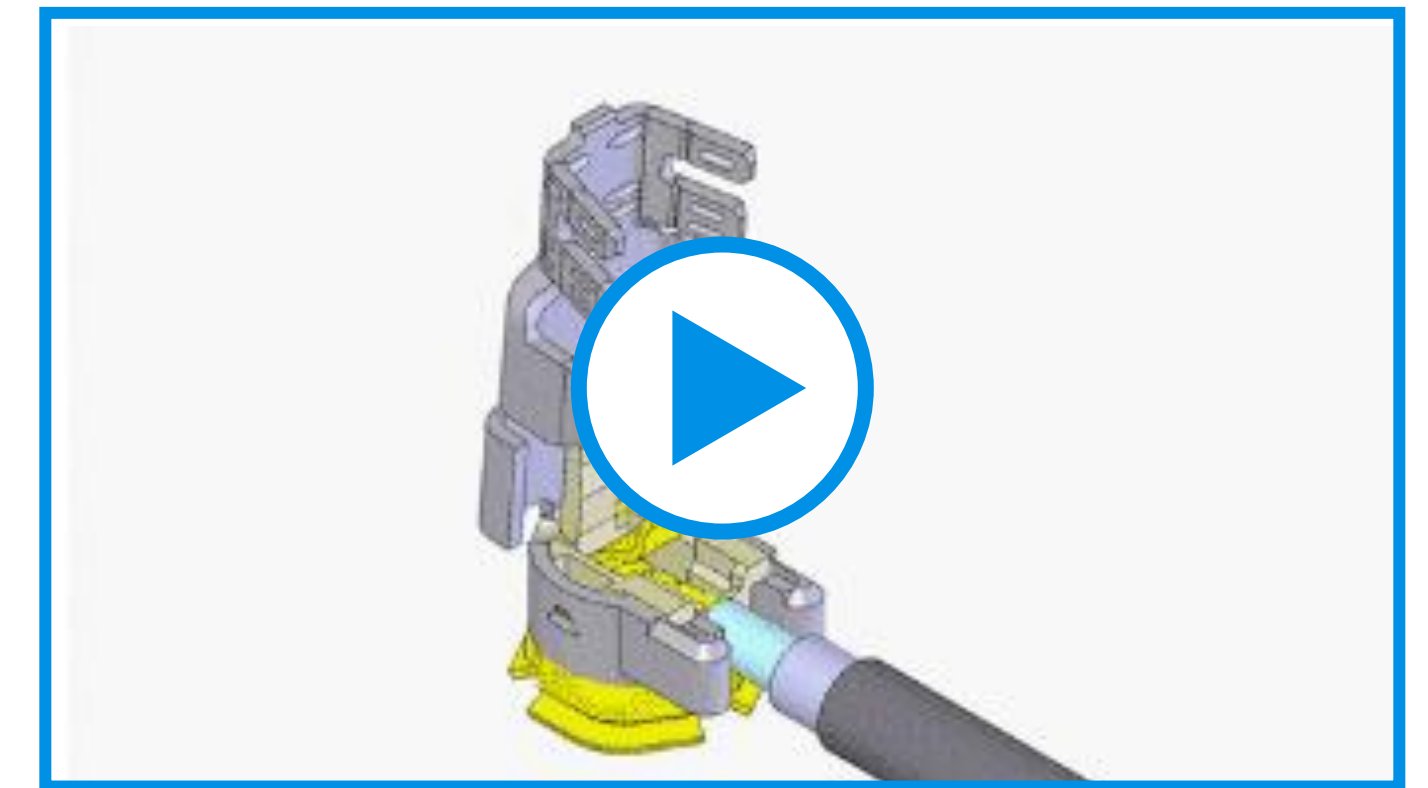
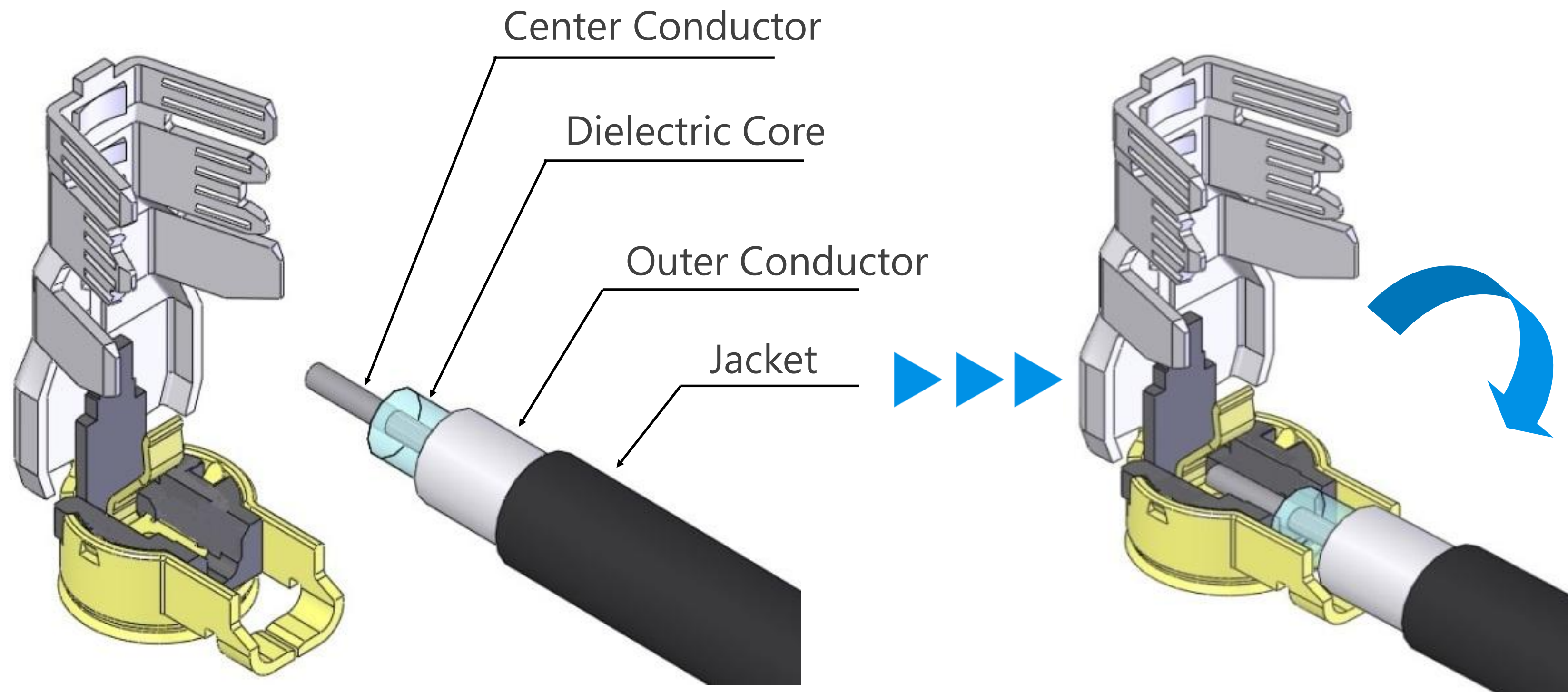
■ Permanent mechanical lock with tactile indication of secure contact



Un-Mating tool
91097-0001

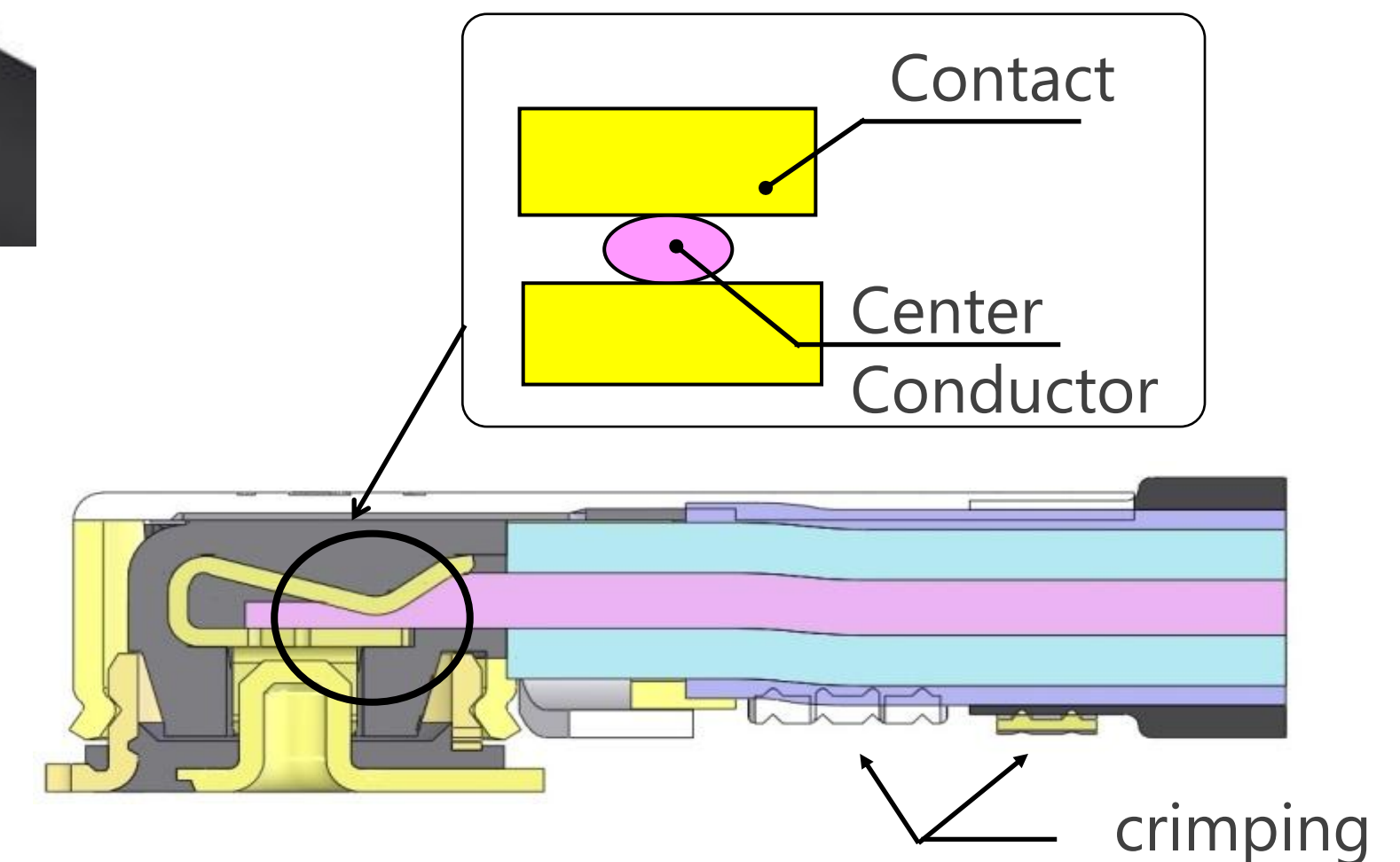
MHF[®] Harnesses

i-Fit[®] Technology: Solderless Wire Crimp Terminating Technology



Play full [i-Fit[®] technology](#) video

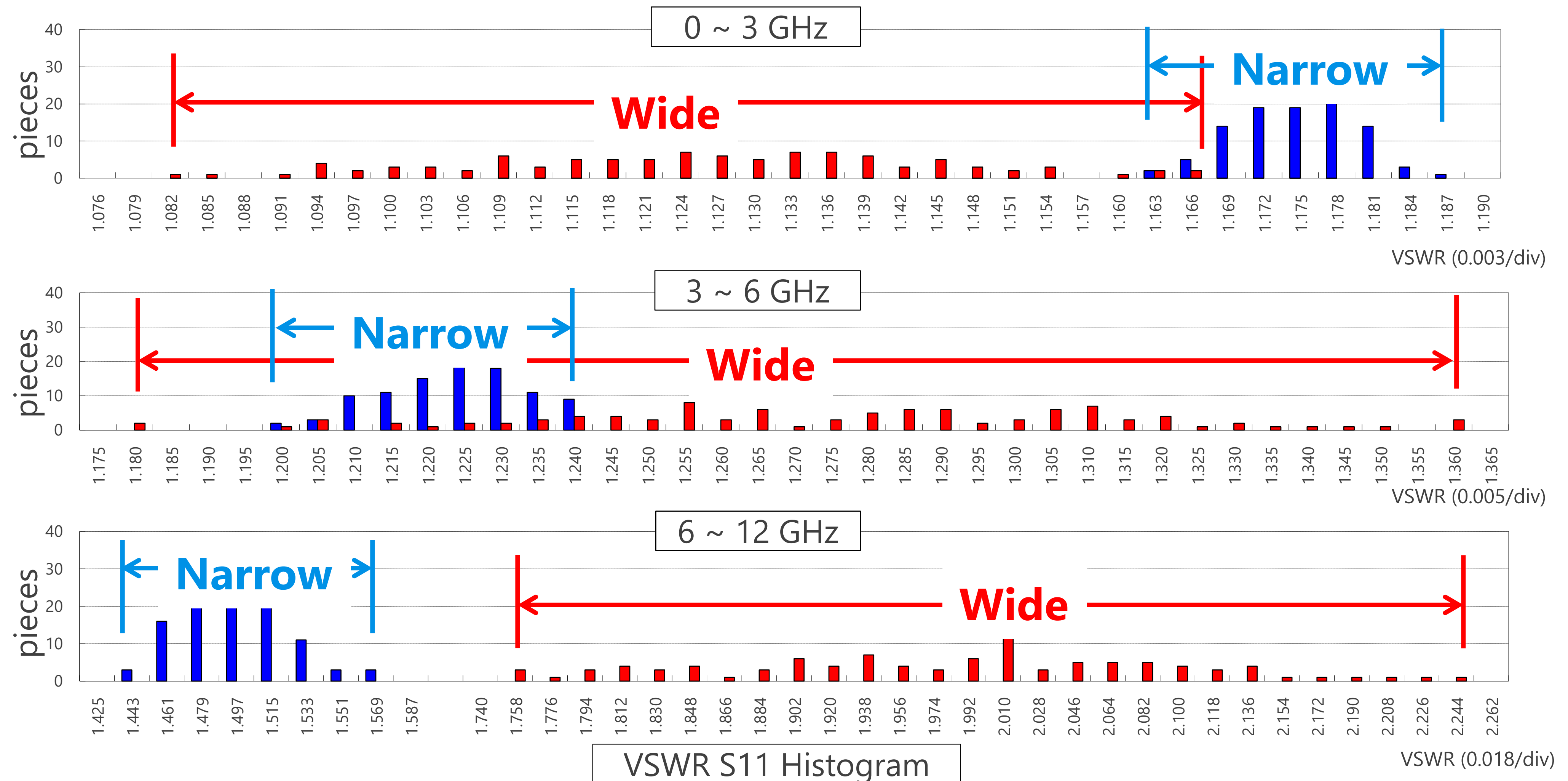
I-PEX's [i-Fit[®] solderless terminating technology](#) is the core of the MHF[®] connector series. Simple and scalable, i-Fit[®] enables MHF[®] harnesses to have consistent performance values within a tight range.



i-Fit[®] Technology: Solder-less crimp advantage versus soldering types

i-Fit[®] offers consistently tight range of performance

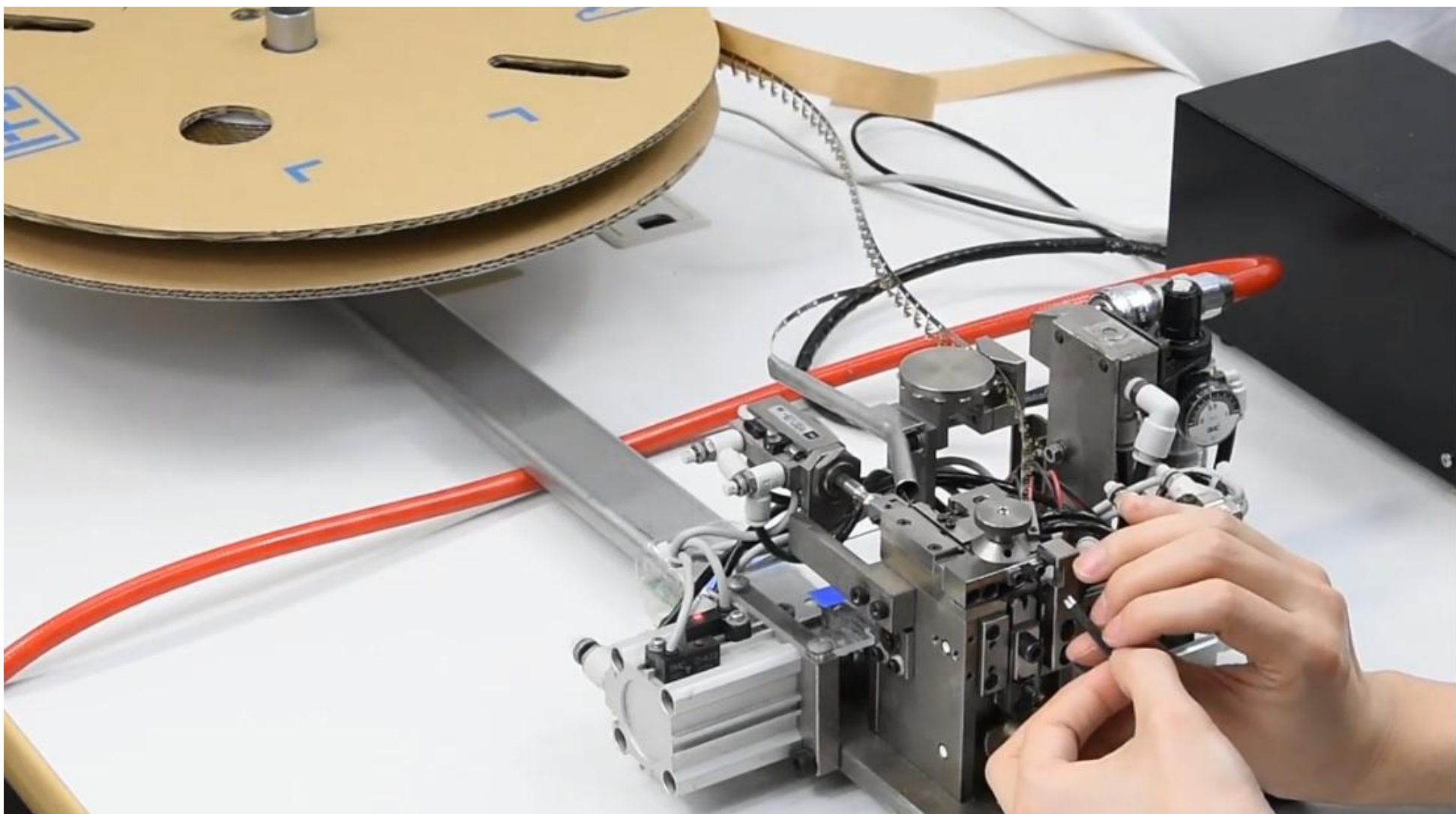
■ I-PEX i-Fit[®] solderless termination (MHF[®] 5)
■ Solder termination



i-Fit[®] Technology: Solder-less crimp advantage versus manual soldering types

Significantly reduced tact time with i-Fit[®]

■ i-Fit[®] Semi-Auto Wiring Jig



		I-PEX MHF [®] "i-Fit [®] "	Manual Soldering
Tact time	Cable strip	Same tact time	
	Termination	6 seconds/ea.	30 seconds/ea.
Qty of cable assemblies a worker can make per month		105,600 assemblies	21,120 assemblies
Number of operator needed	1M cable assemblies/month	10	48
	2M cable assemblies/month	19	95

*Calculated based on operation hours of 22days/month (8hours/day)

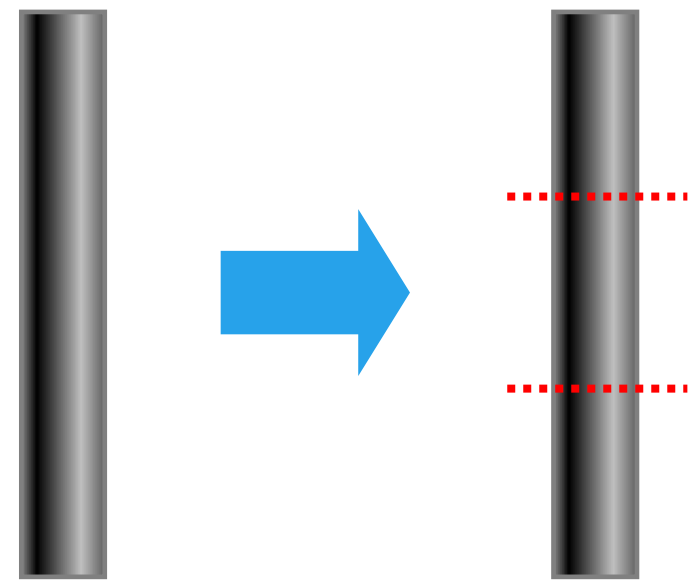
I-PEX's i-Fit[®] technology has enabled antenna and harness makers to have the ability to terminate MHF[®] products in local production facilities. With over 1,000 [termination machines](#) in the field, more than 100 customers produce MHF[®] harnesses and antennas ensuring quality when using genuine MHF[®] components.

MHF[®] Harness Assemblies : Available for supply as a harness assemblies

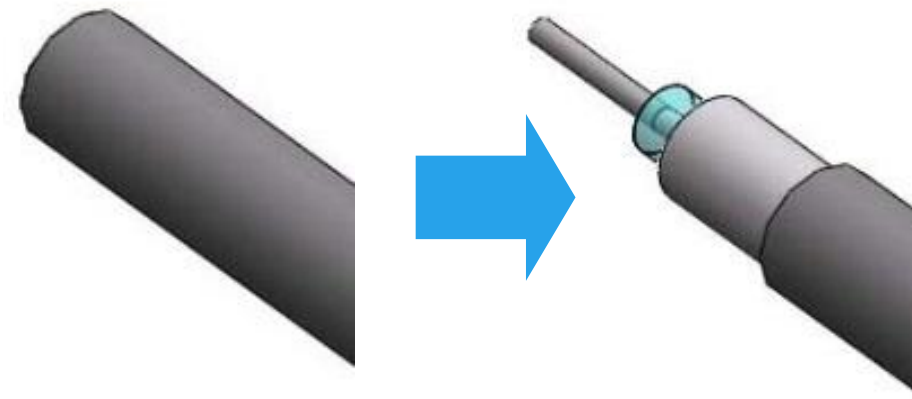
I-PEX provides harness assemblies made with Fully Automated Machines and i-Fit[®] technology

Fully Automated Process

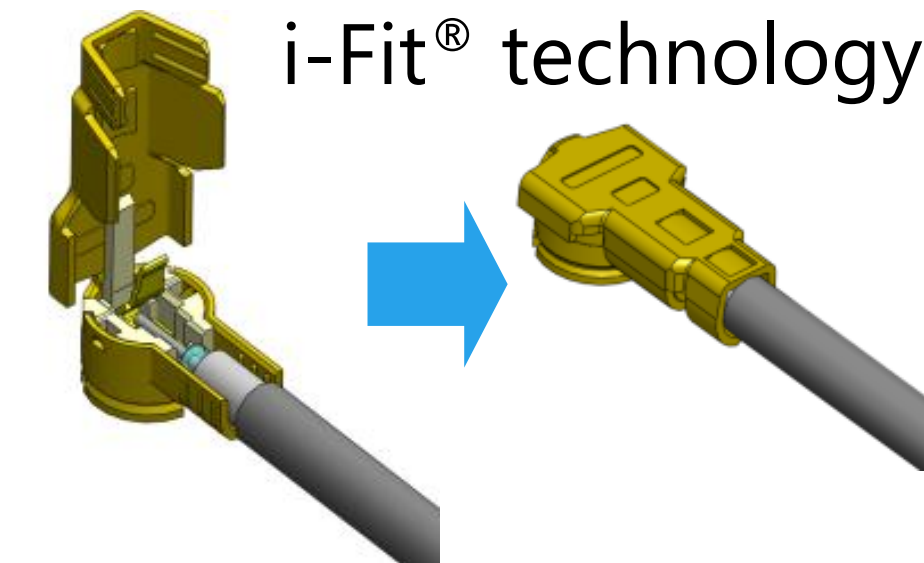
1 Cable cut



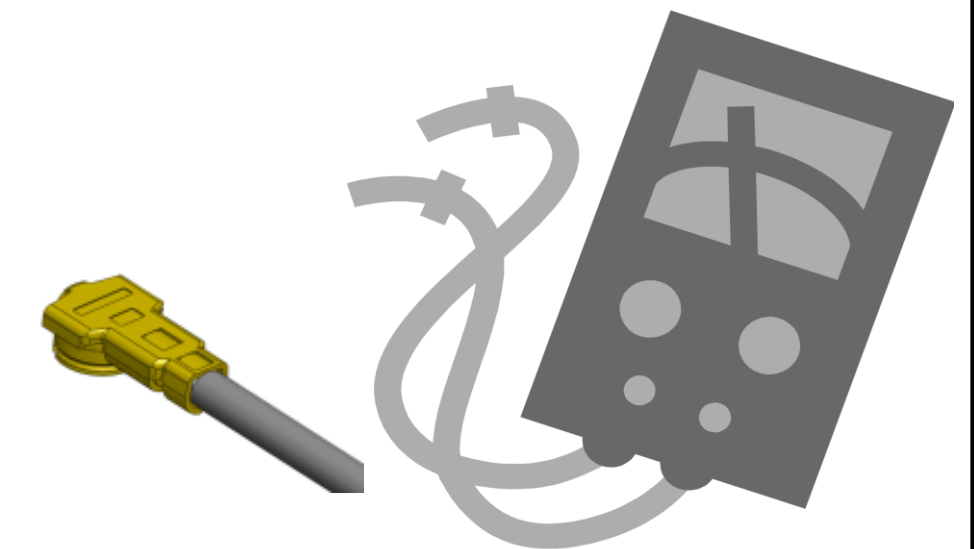
2 Cable strip



3 Crimp



4 Electric Inspection



MHF[®] Harness Assemblies : Cable clamp and surface mount clip

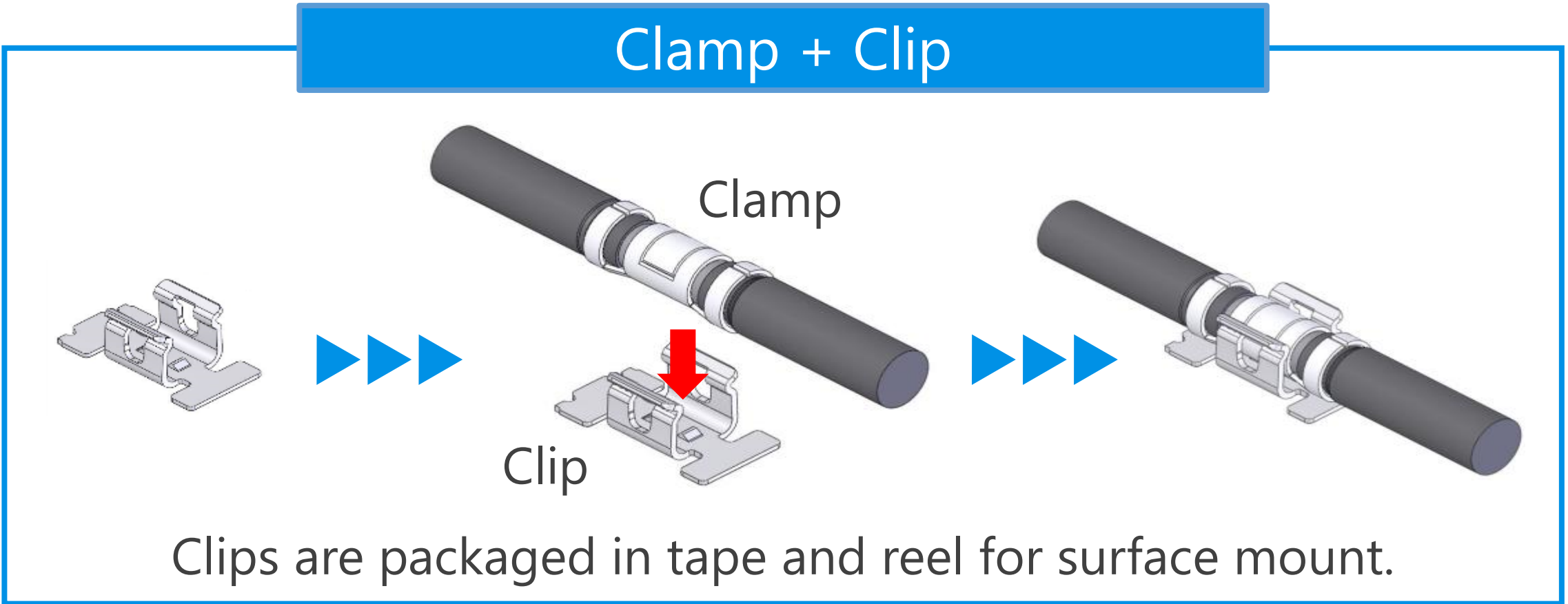
		Grounding clamp 3 mm length	Grounding clamp 6 mm length	Clip for grounding clamp MP-A series
Appearance (Reference)				
Coax O.D. (Center Conductor AWG)	1.37 mm (30)	●	●	● MP-A04 (P/N 3224-0001)
	1.13 mm (32)	●	●	● MP-A02 (P/N 3182-0001)
	0.81 mm (36)	●	●	● MP-A01 (P/N 3096-0001)
	0.64 mm (36)	●	●	● MP-A03 (P/N 3186-0001)

Minimum distance between clamps



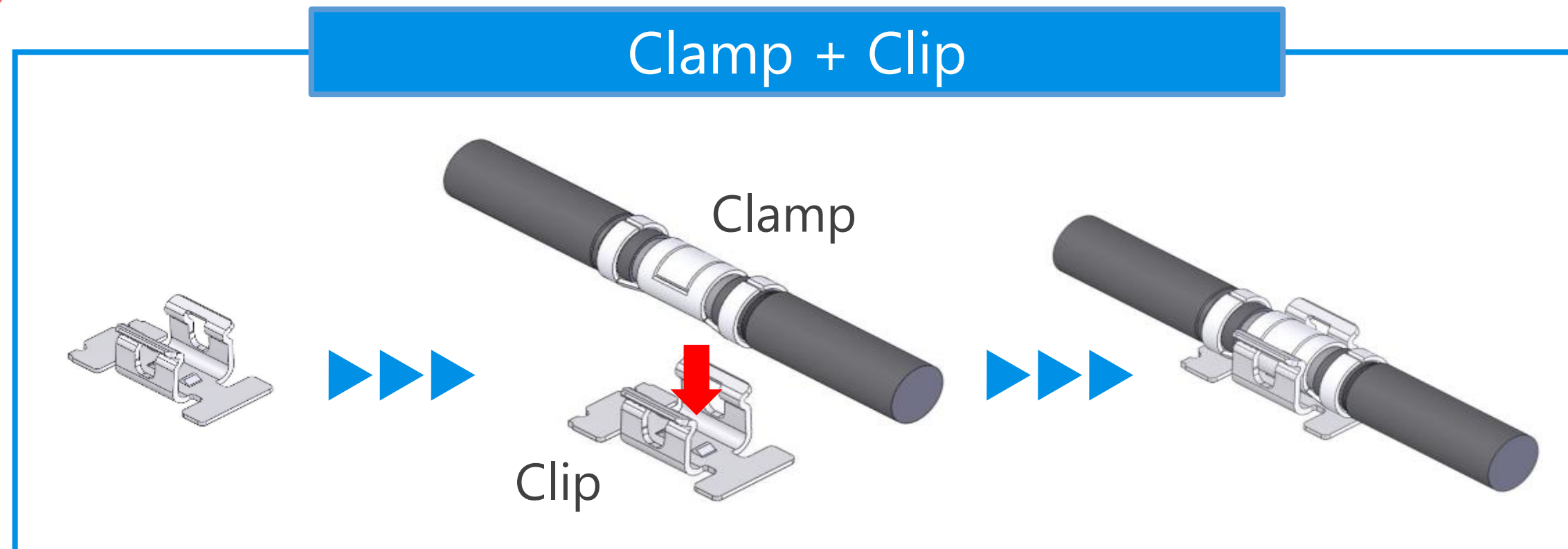
A	B	C
7 mm min.	10 mm min.	20 mm min.

*Depending on the harness specifications, this condition may not apply. Please contact our sales for details.



MHF[®] Harness Assemblies : Cable clamp and surface mount clip

Clamp + Clip

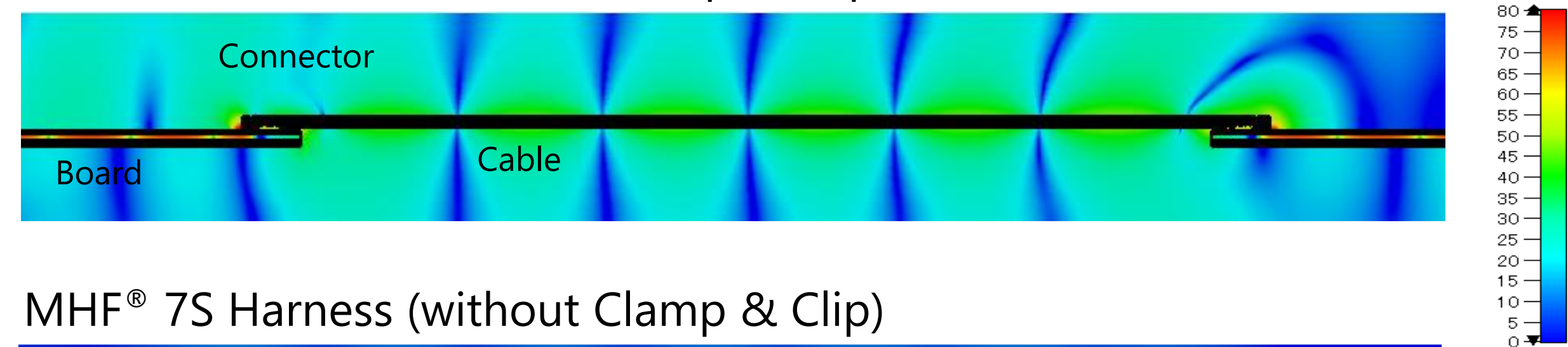


Provides EMI improvements for dense RF applications

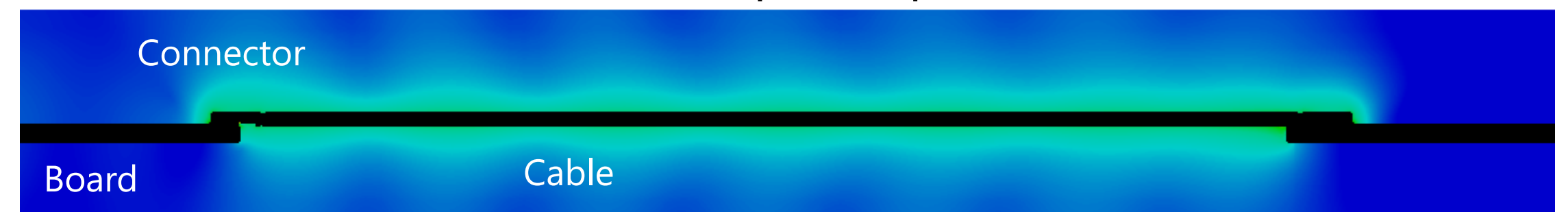
Ideal for 5G mmWave applications

Electric Field Simulations

MHF[®] 4L Harness (without Clamp & Clip)

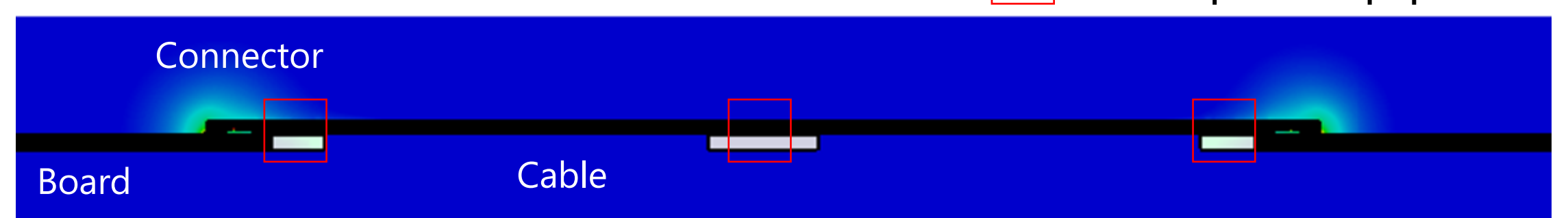


MHF[®] 7S Harness (without Clamp & Clip)



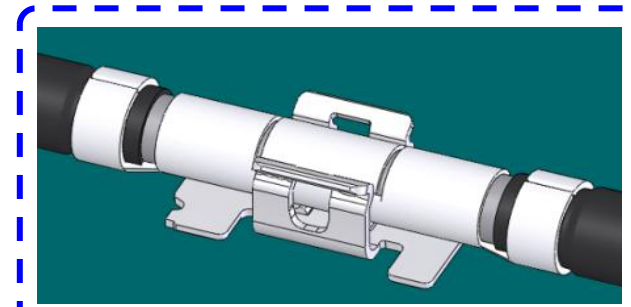
MHF[®] 7S Harness with Clamp & Clip

□ : Clamp & Clip points

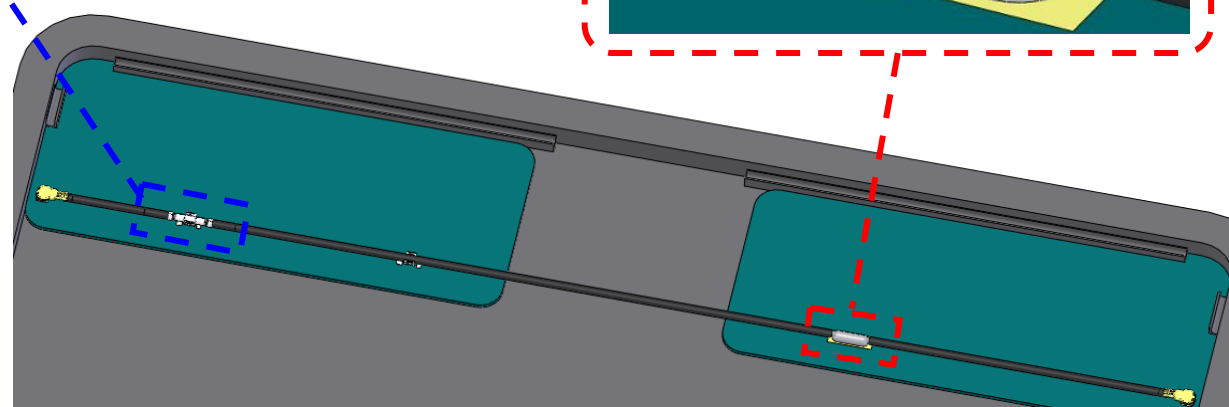
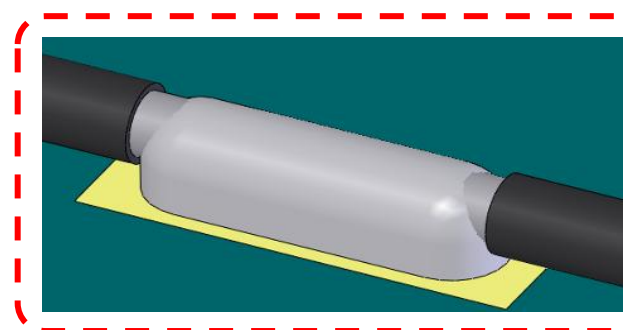


Reduces tact time for assembly and rework

MP-A & Clamp

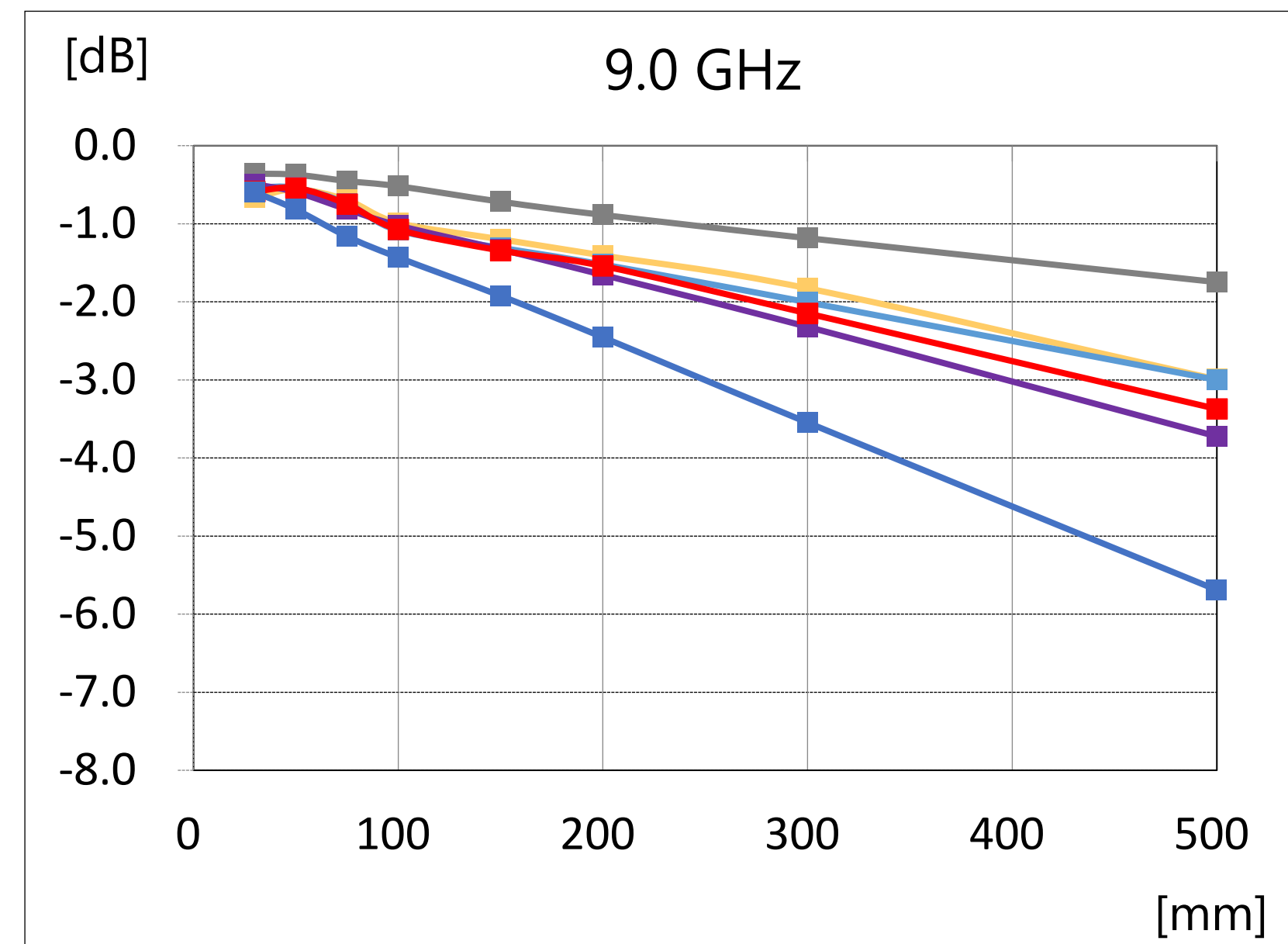
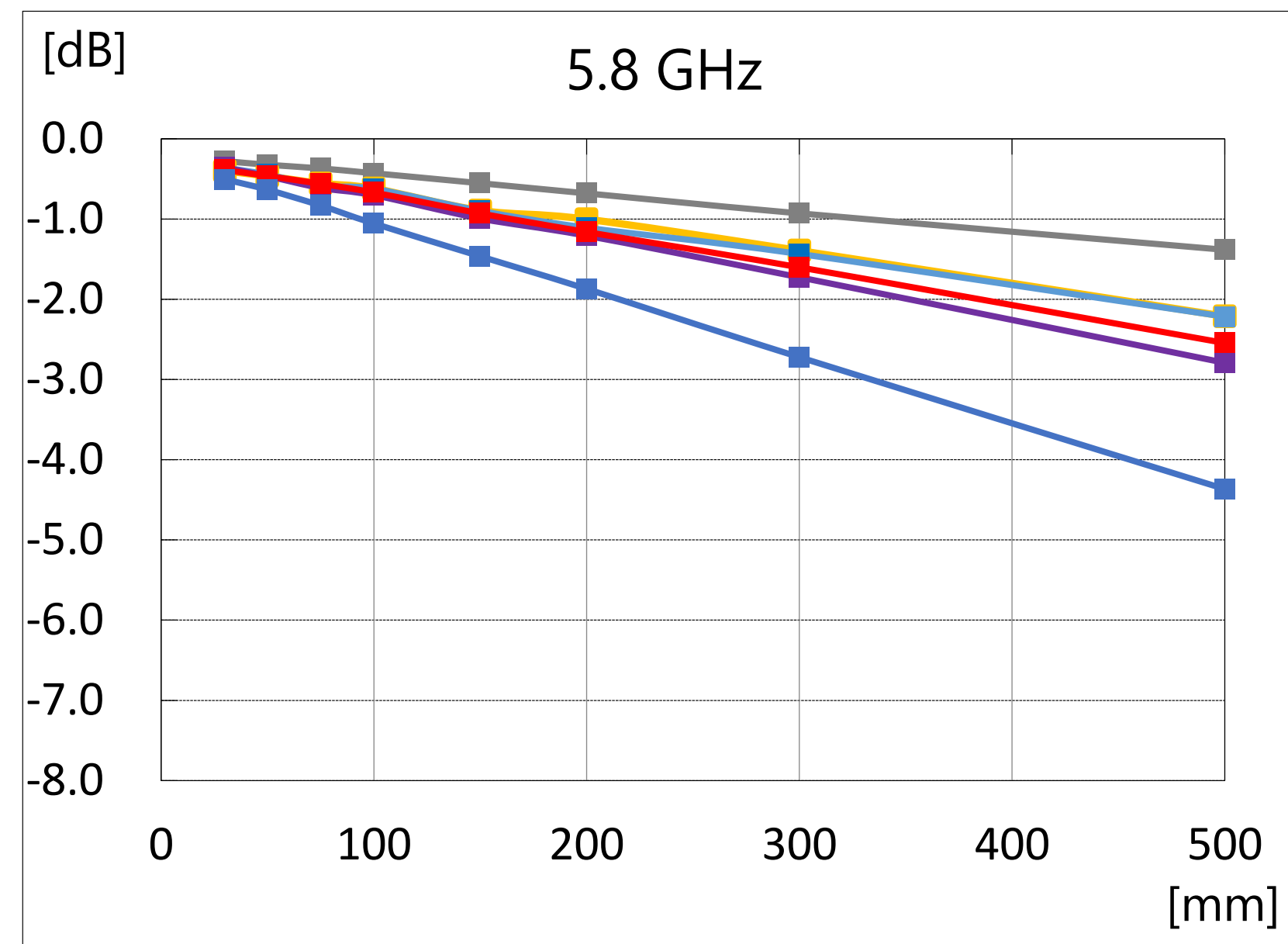
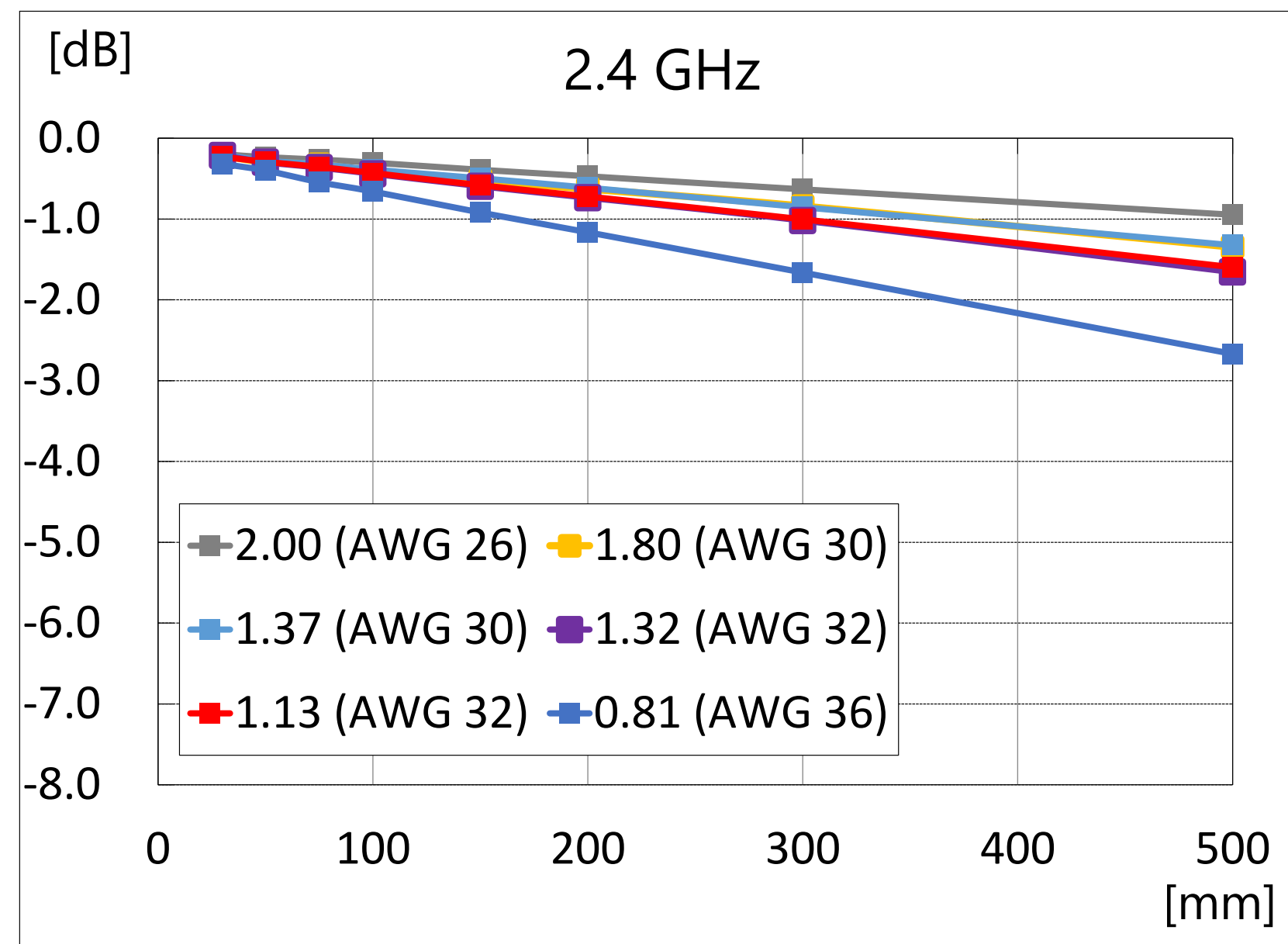


Soldering



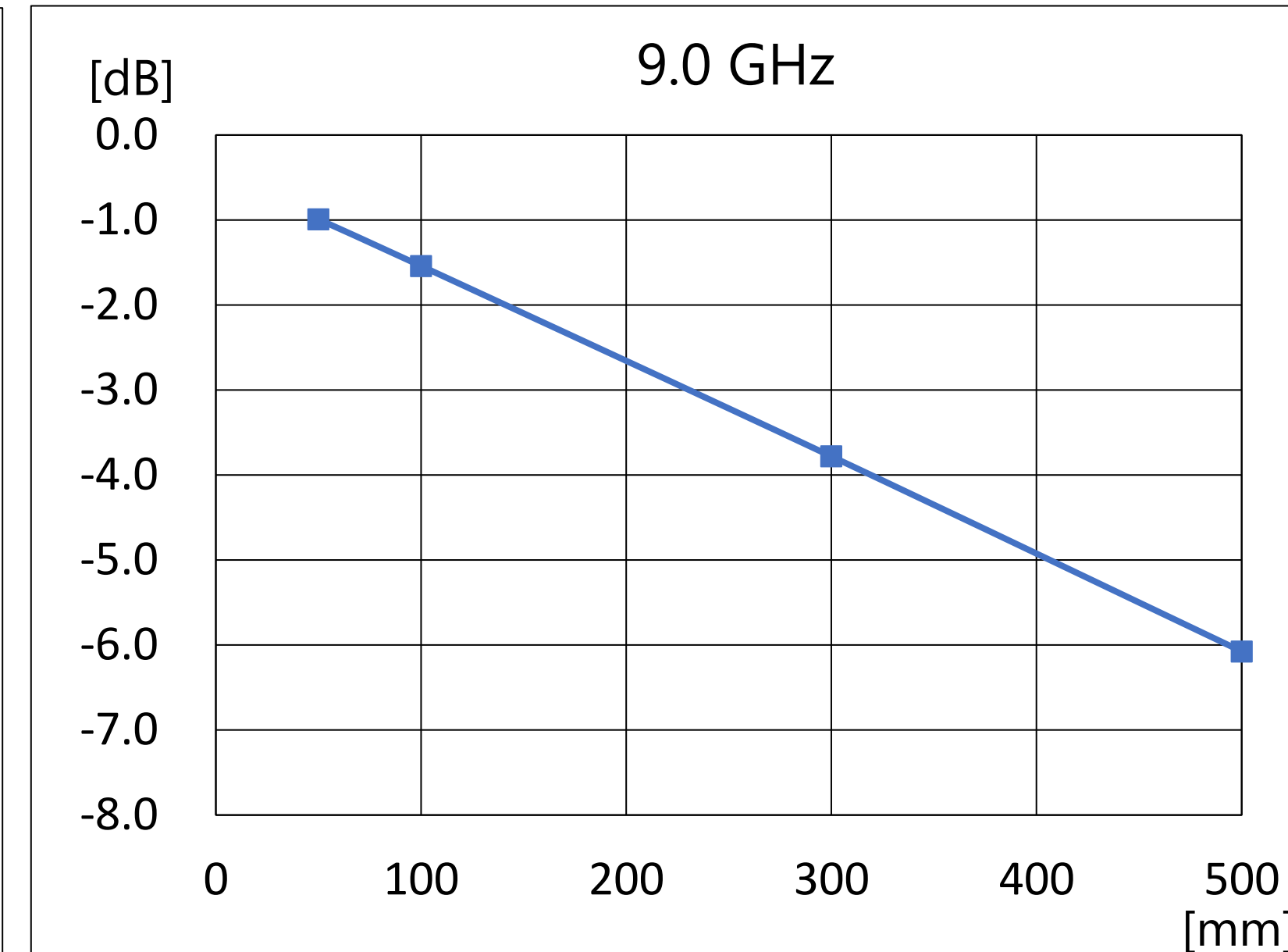
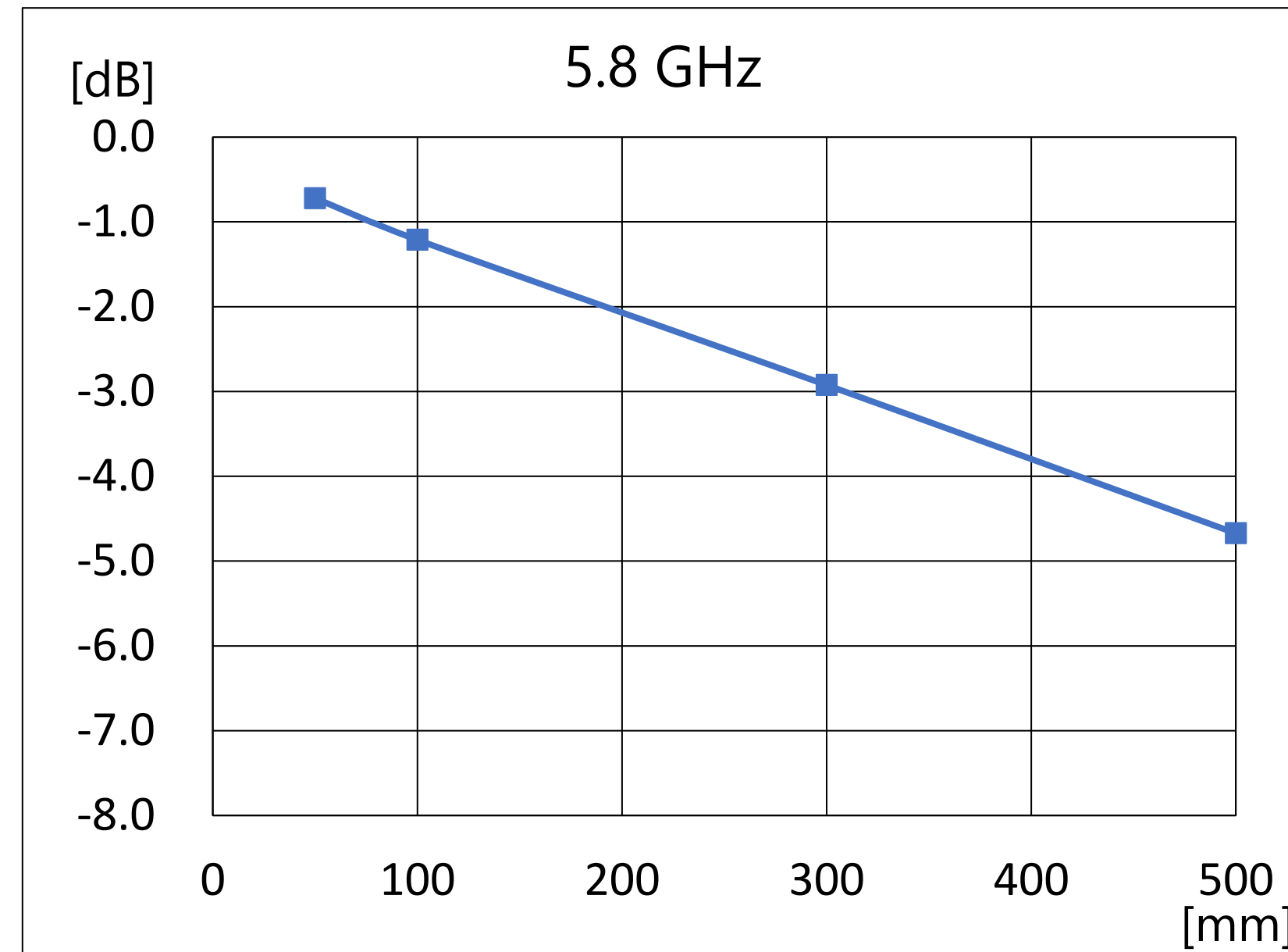
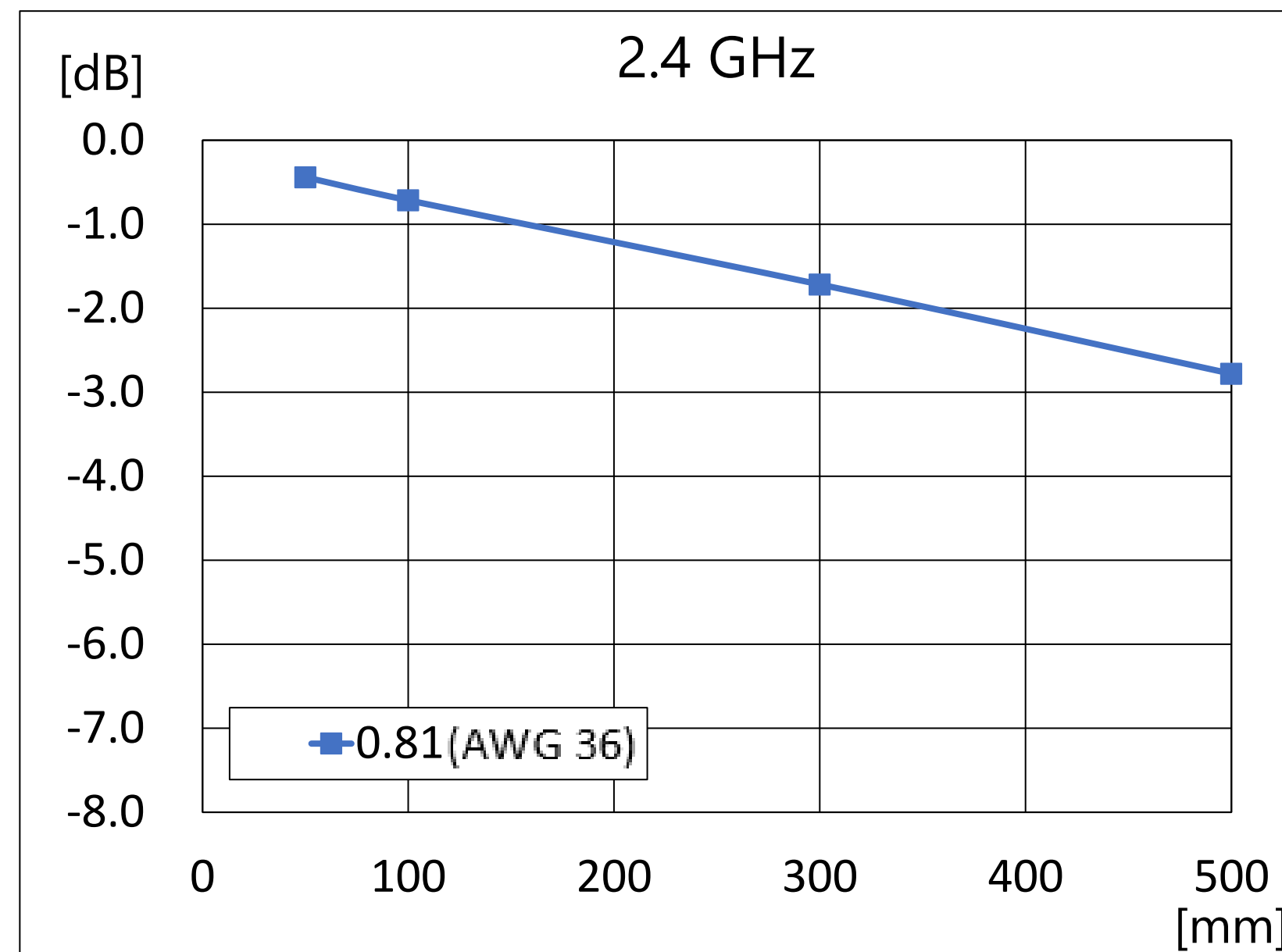
Cable insertion loss : MHF[®] I

■ Harness Length (mm) vs Insertion Loss (S21)



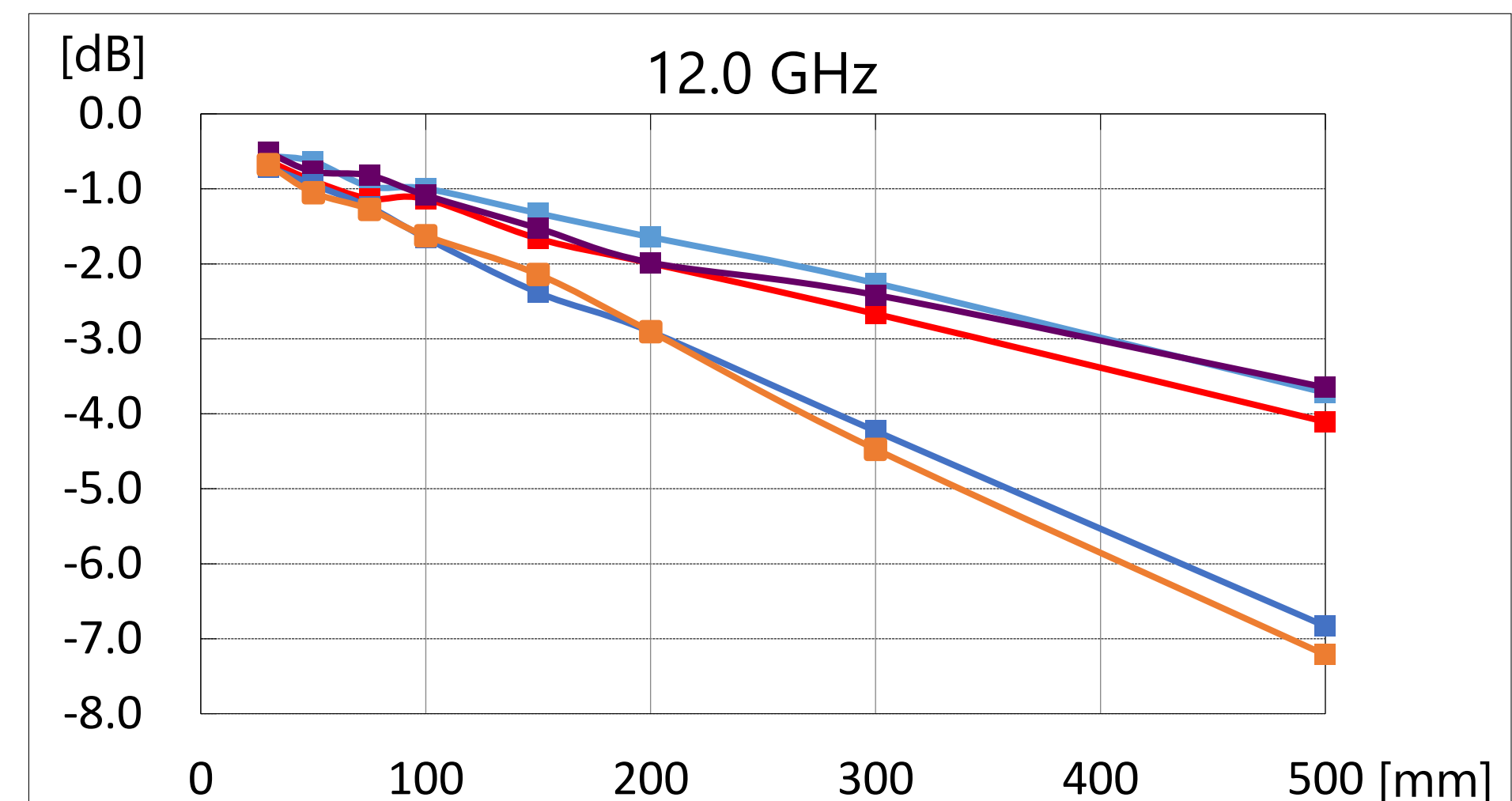
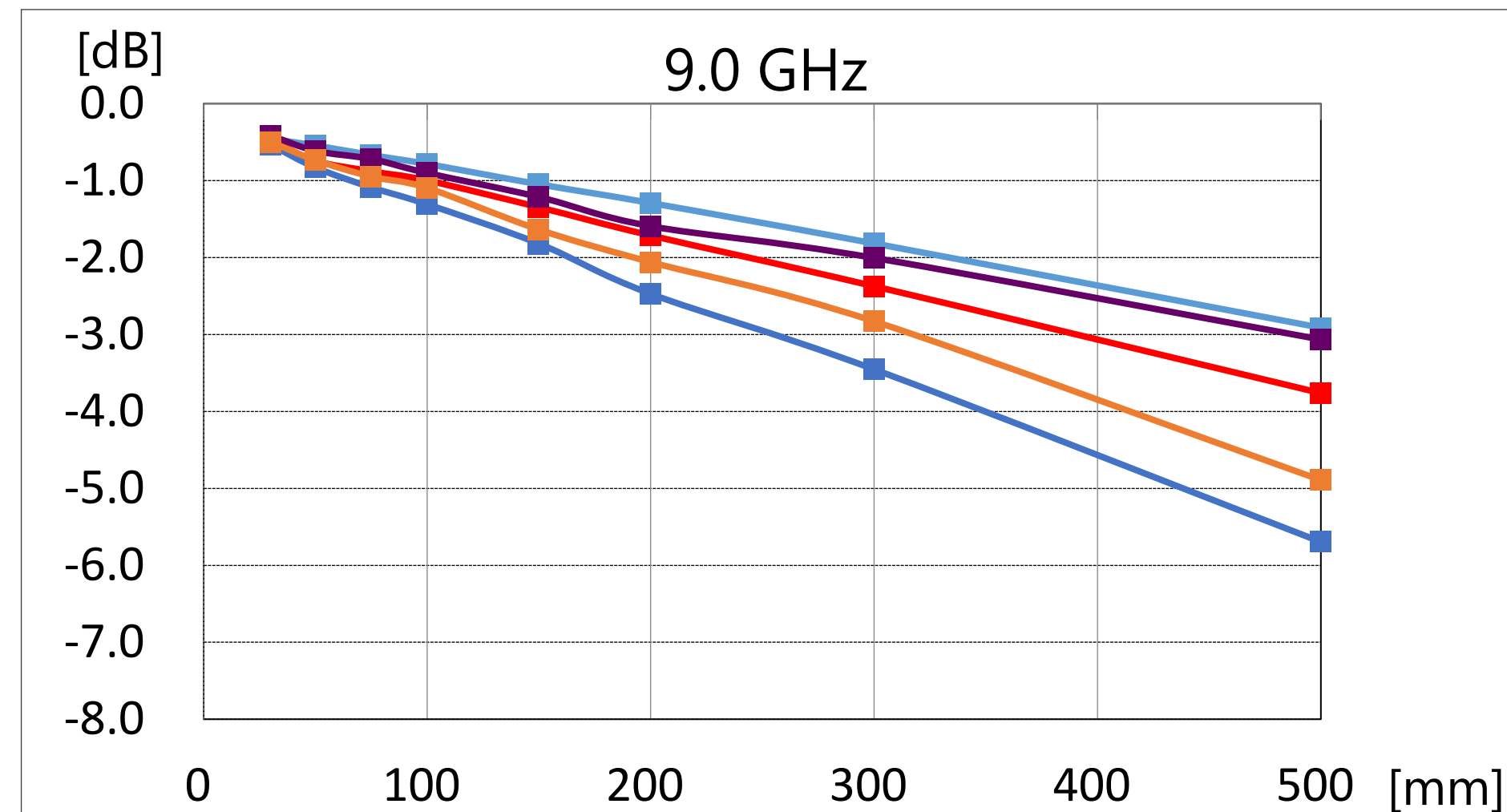
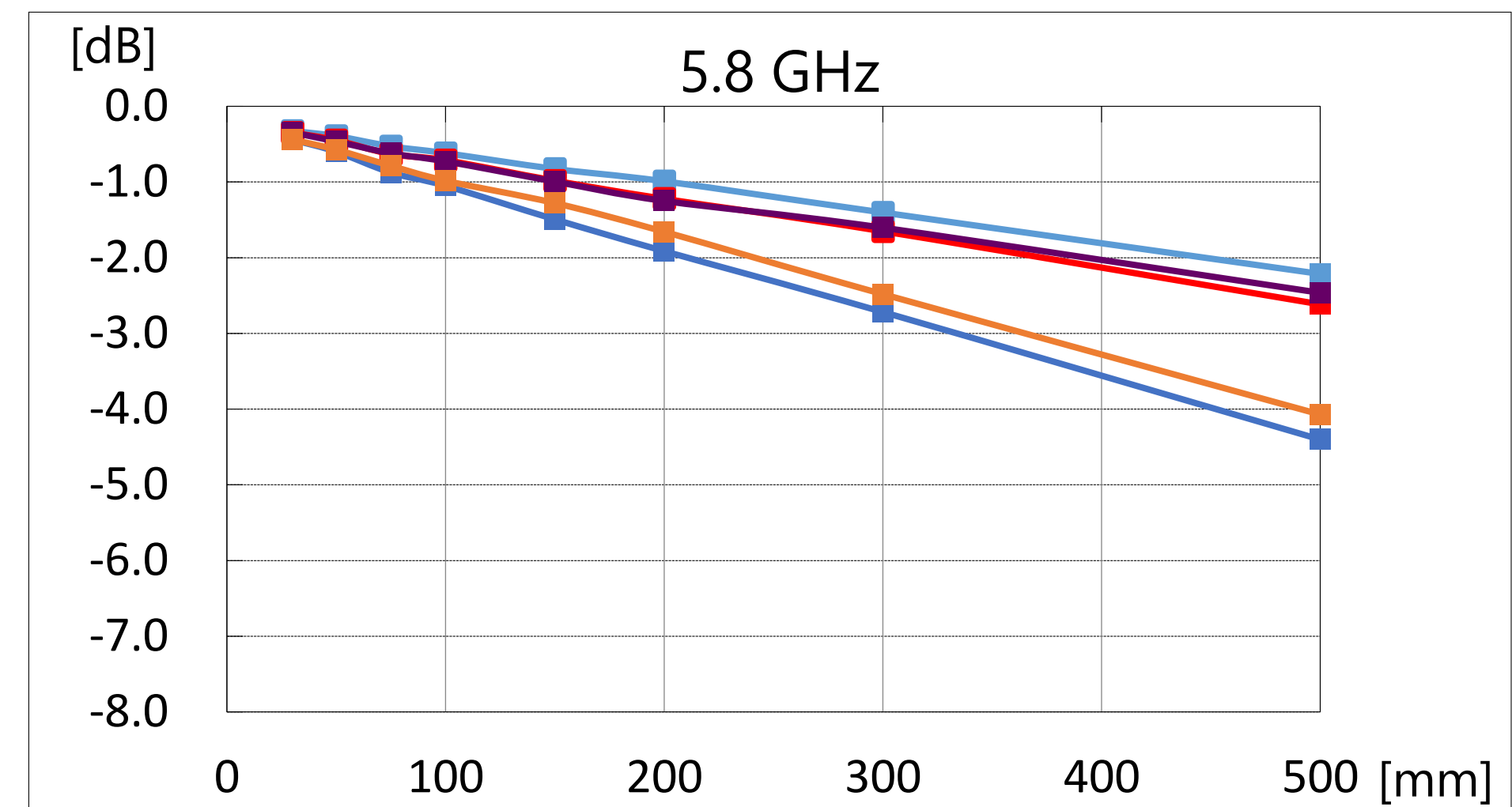
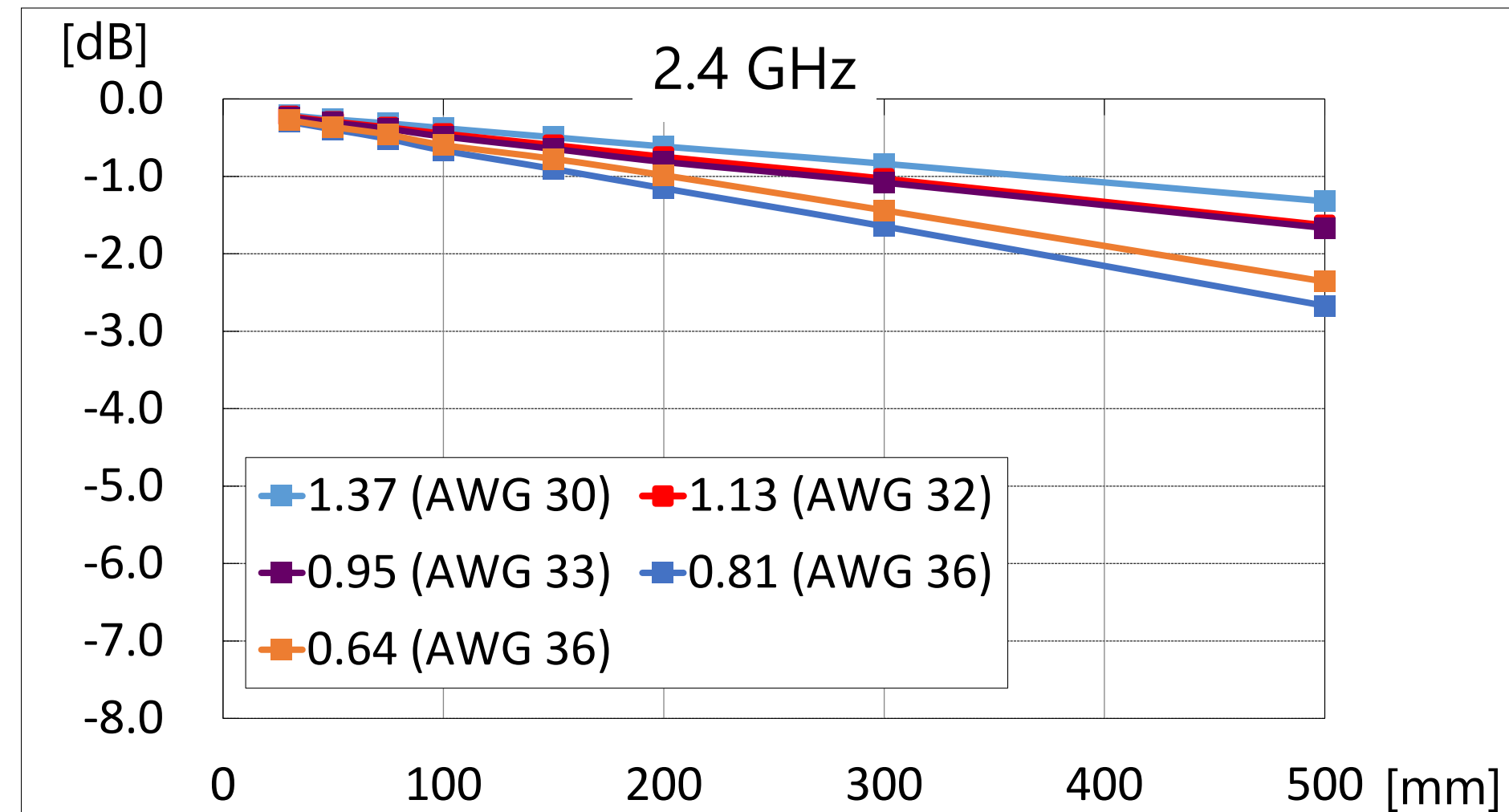
Cable insertion loss : MHF[®] 4

■ Harness Length (mm) vs Insertion Loss (S21)



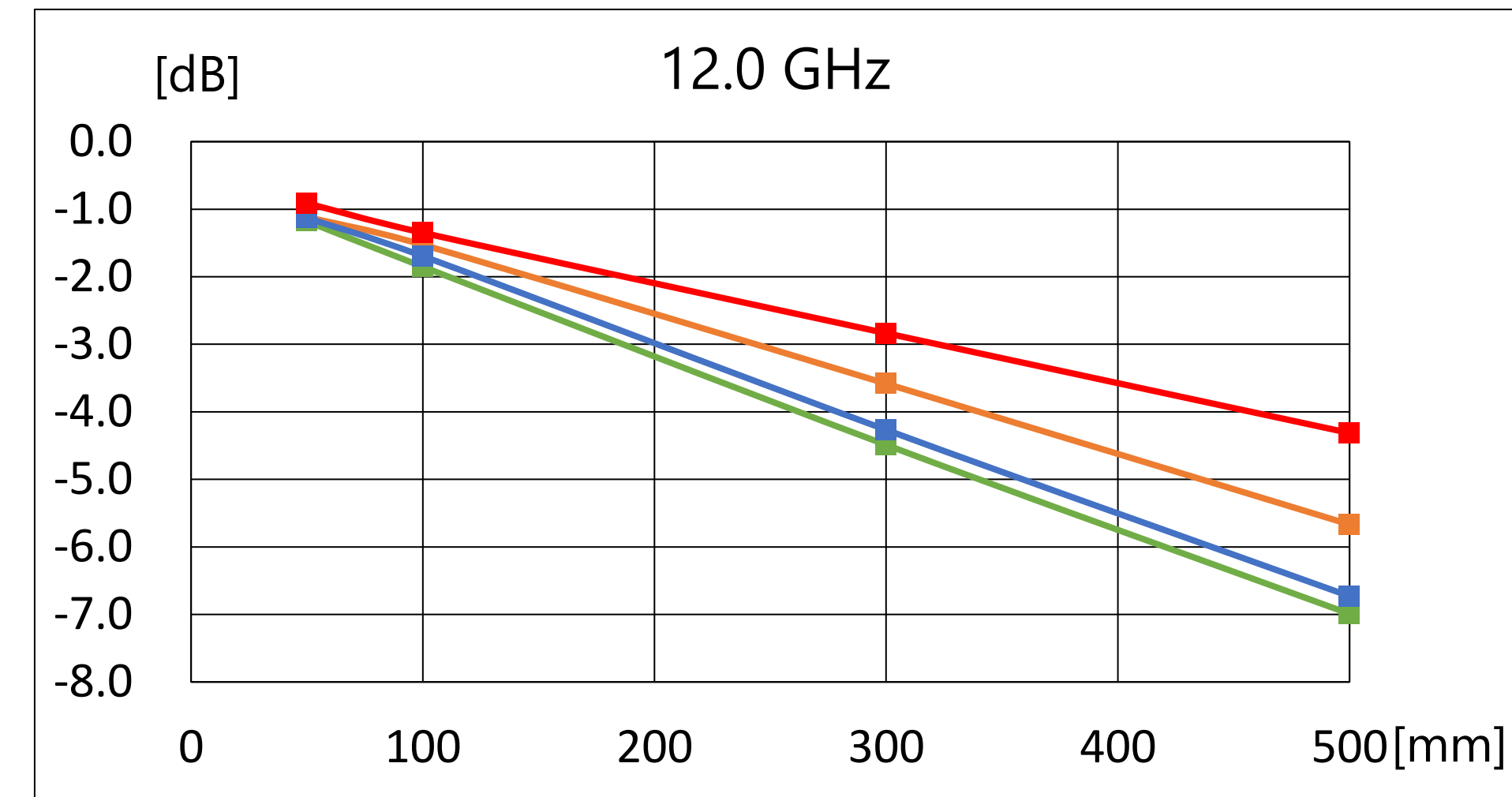
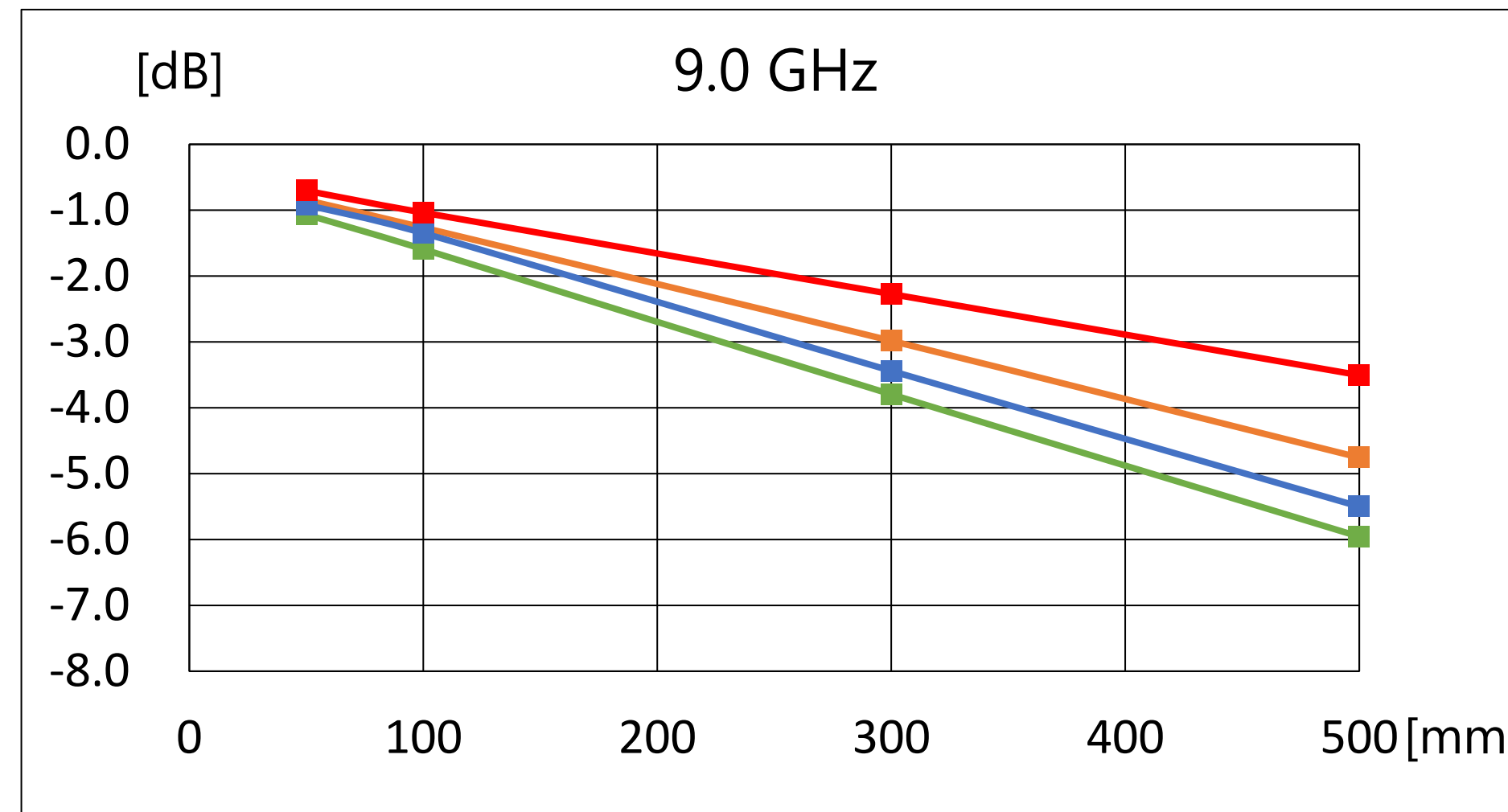
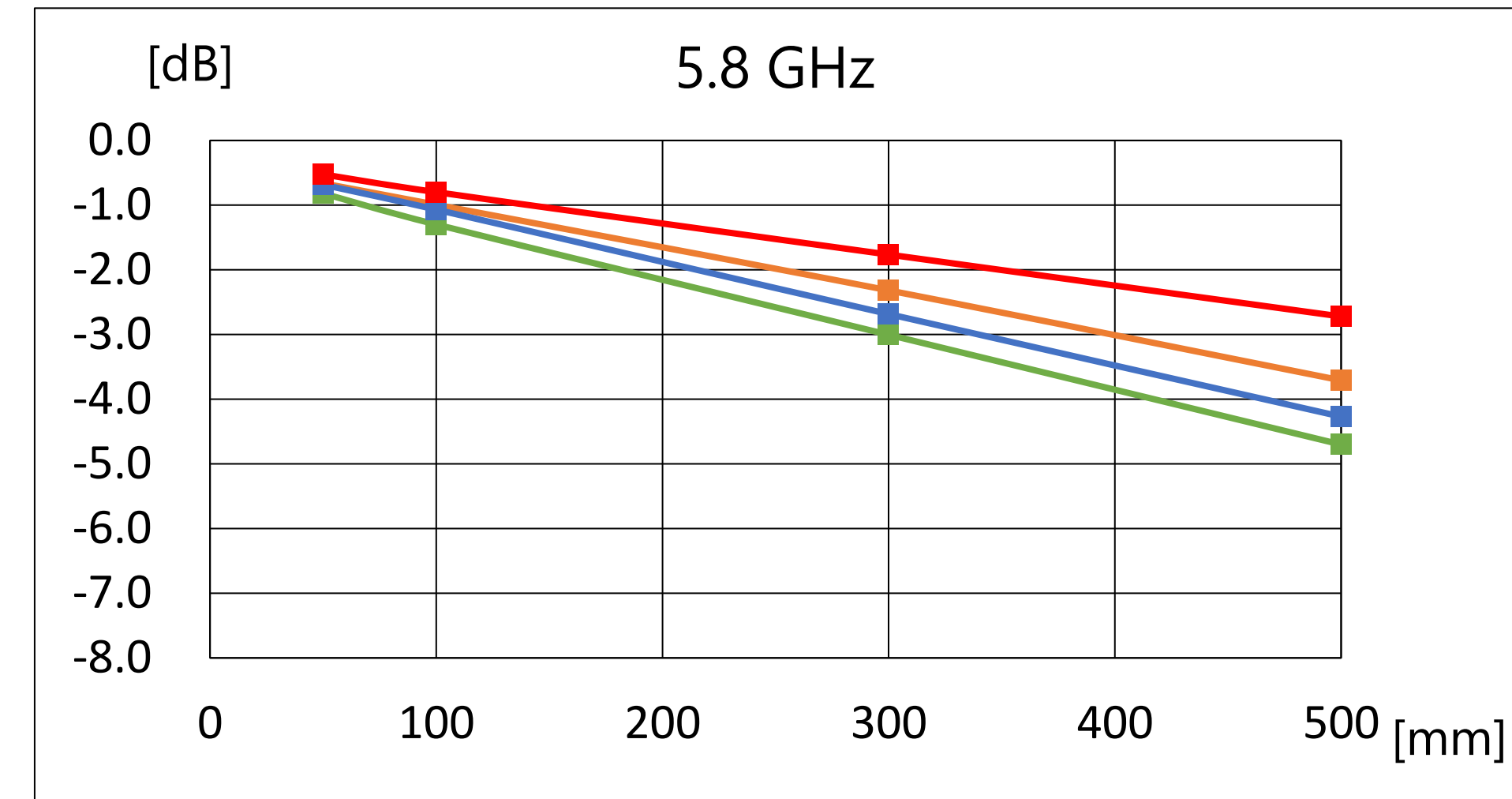
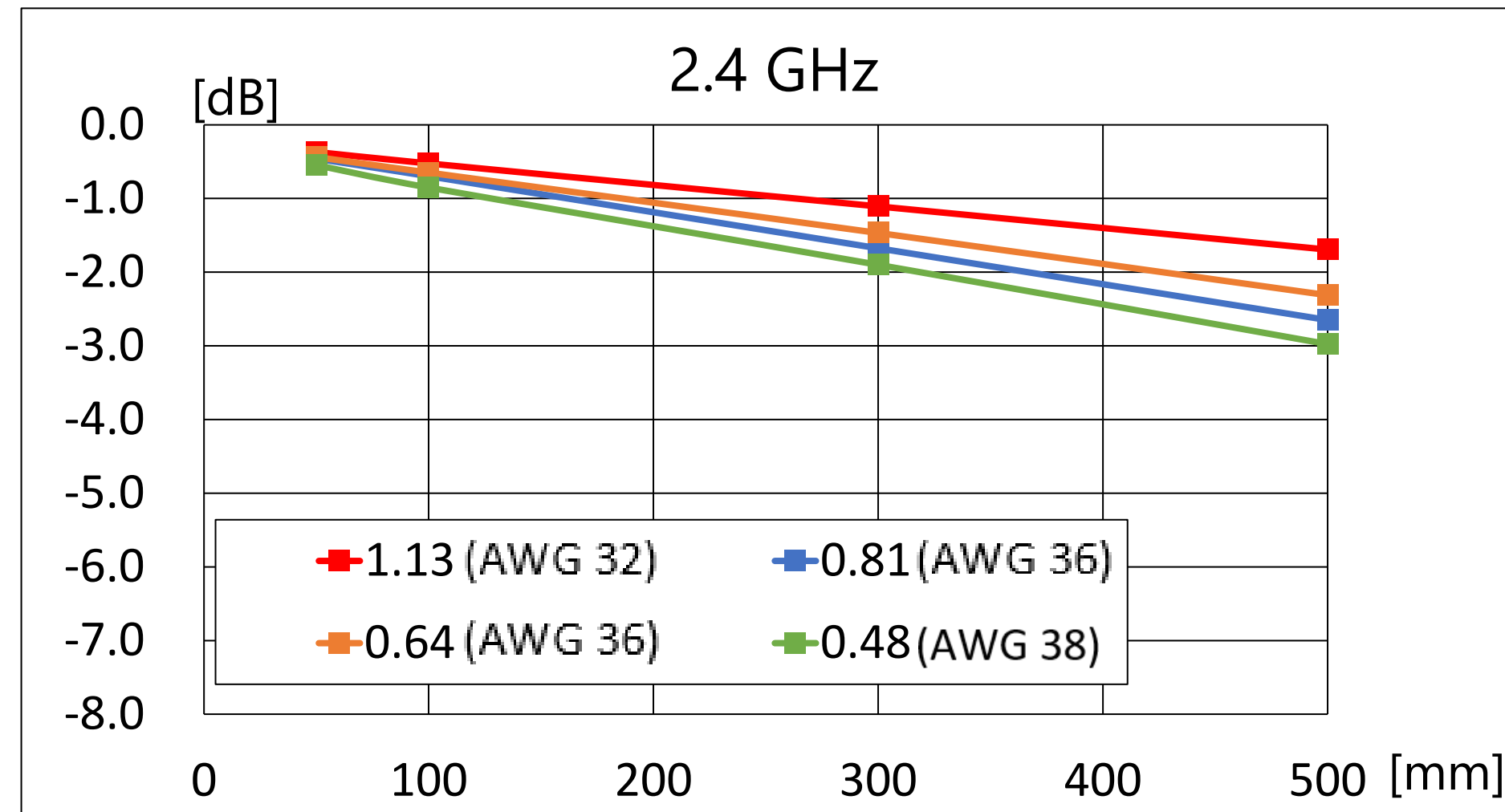
Cable insertion loss : MHF[®] 4L

■ Harness Length (mm) vs Insertion Loss (S21)



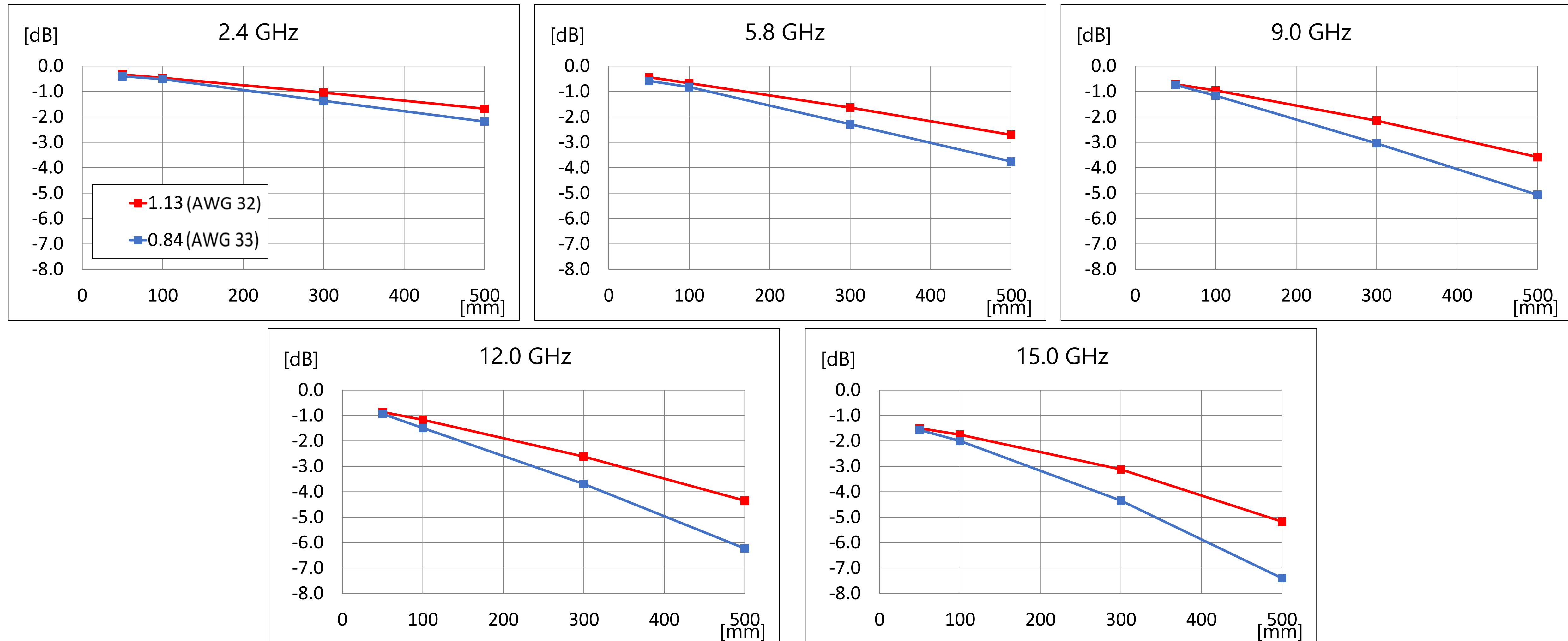
Cable insertion loss : MHF[®] 5

■ Harness Length (mm) vs Insertion Loss (S21)



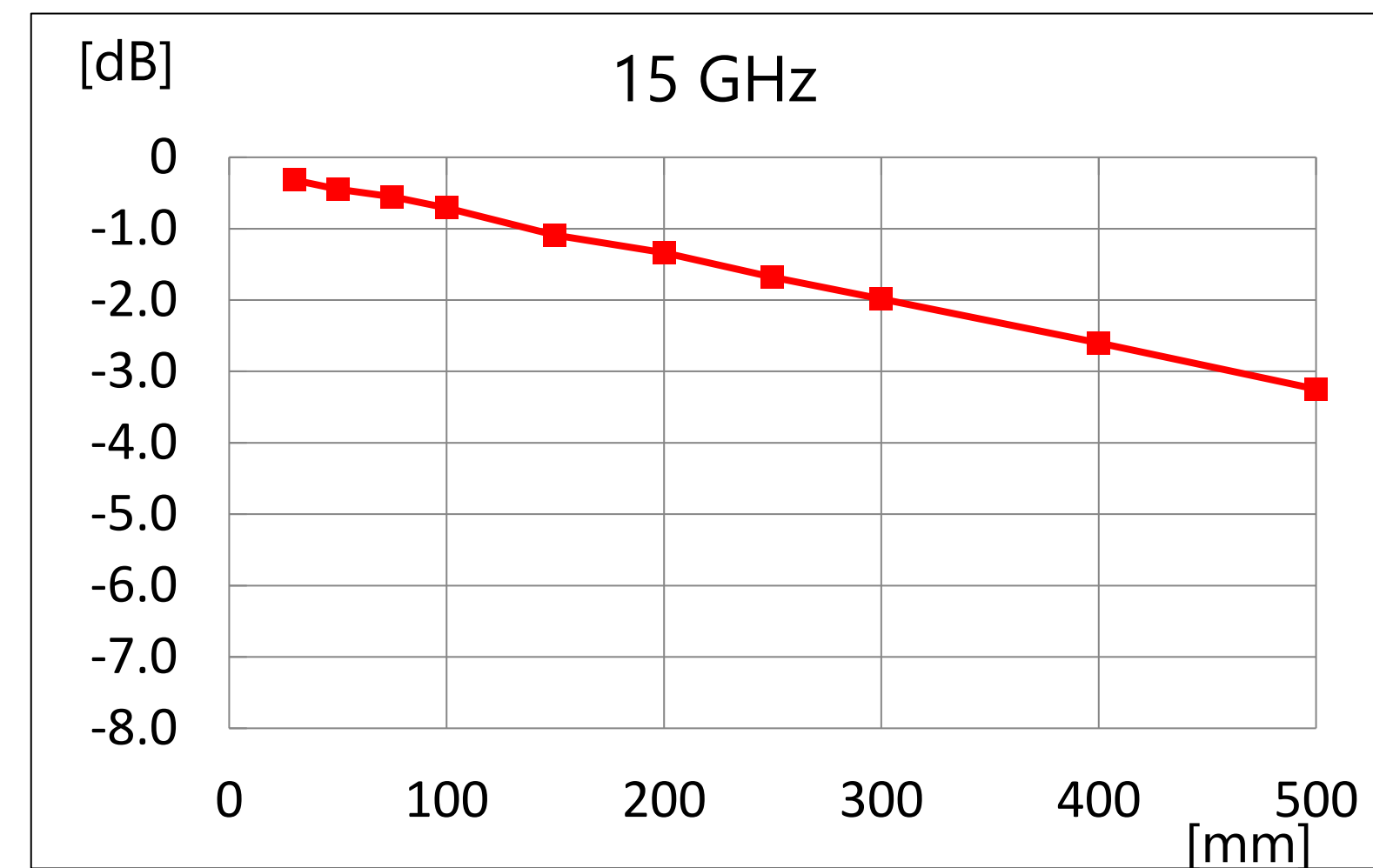
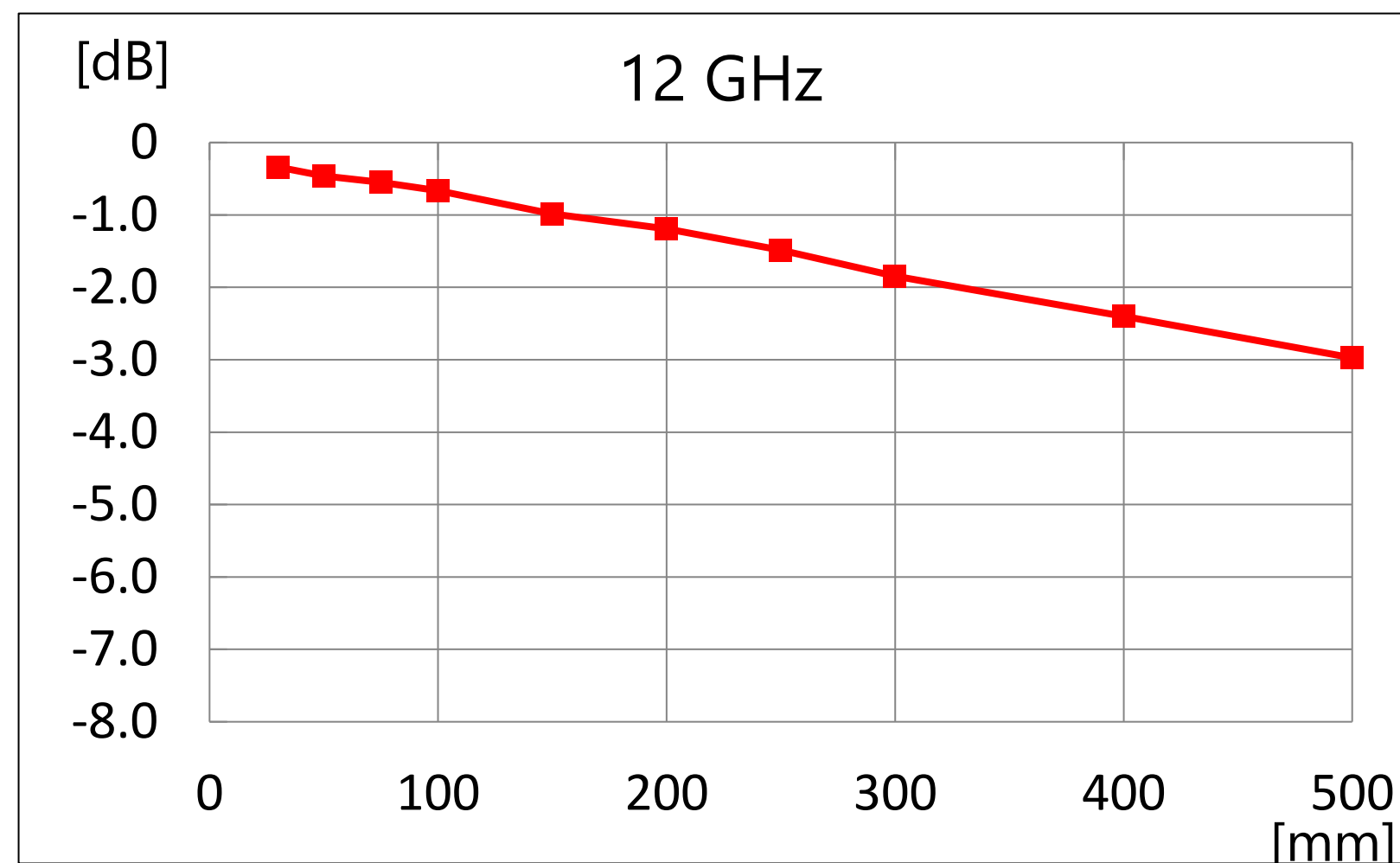
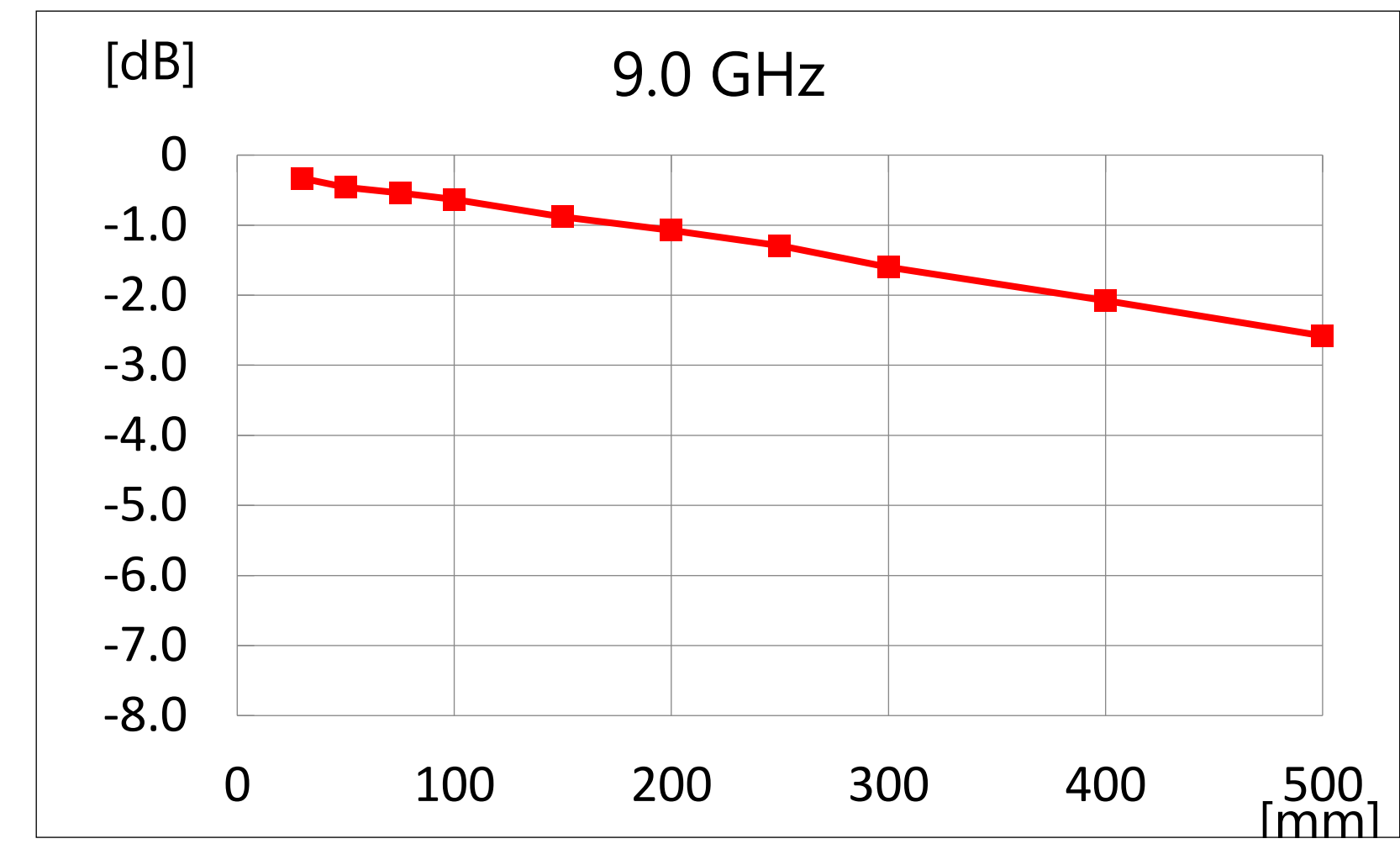
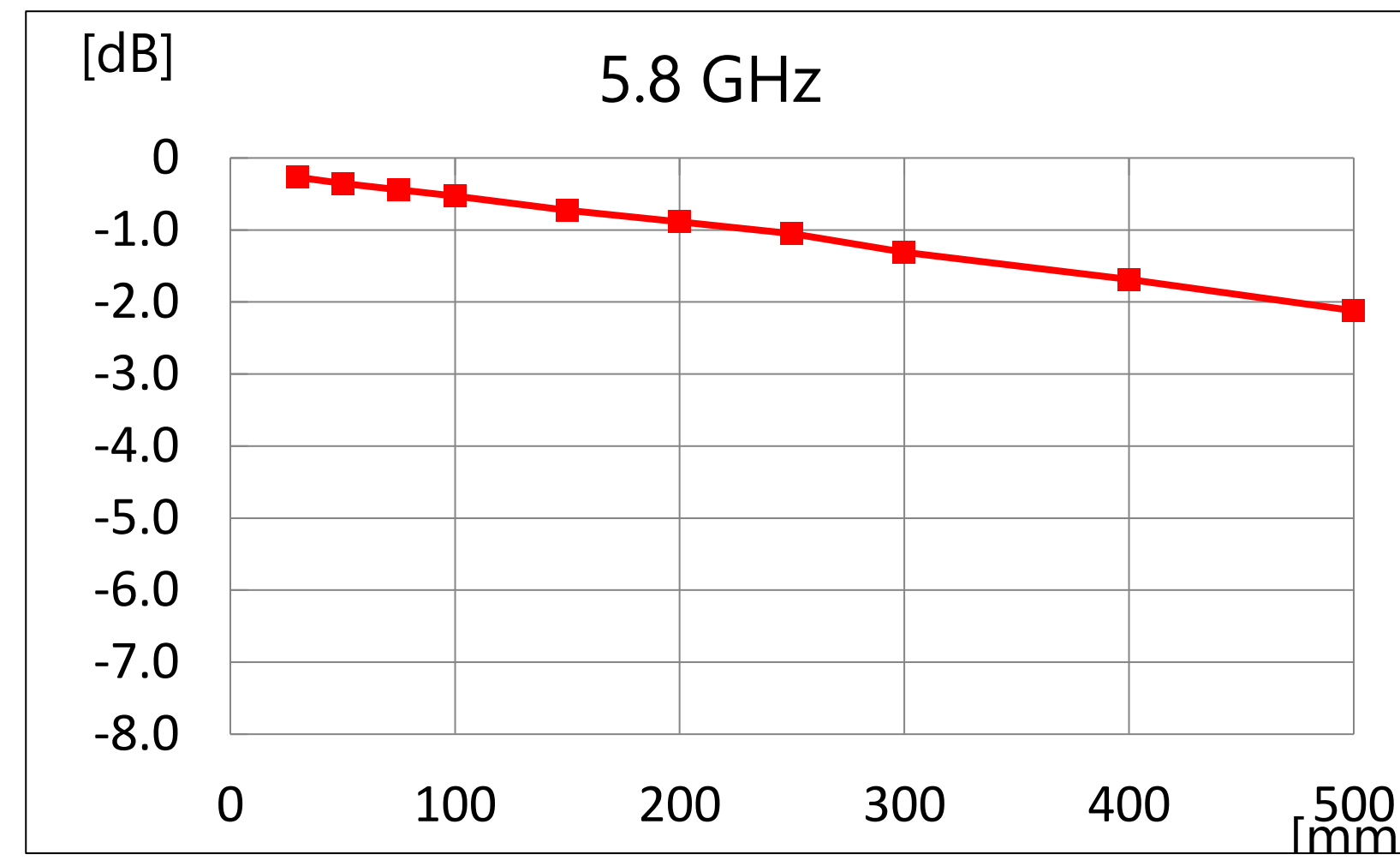
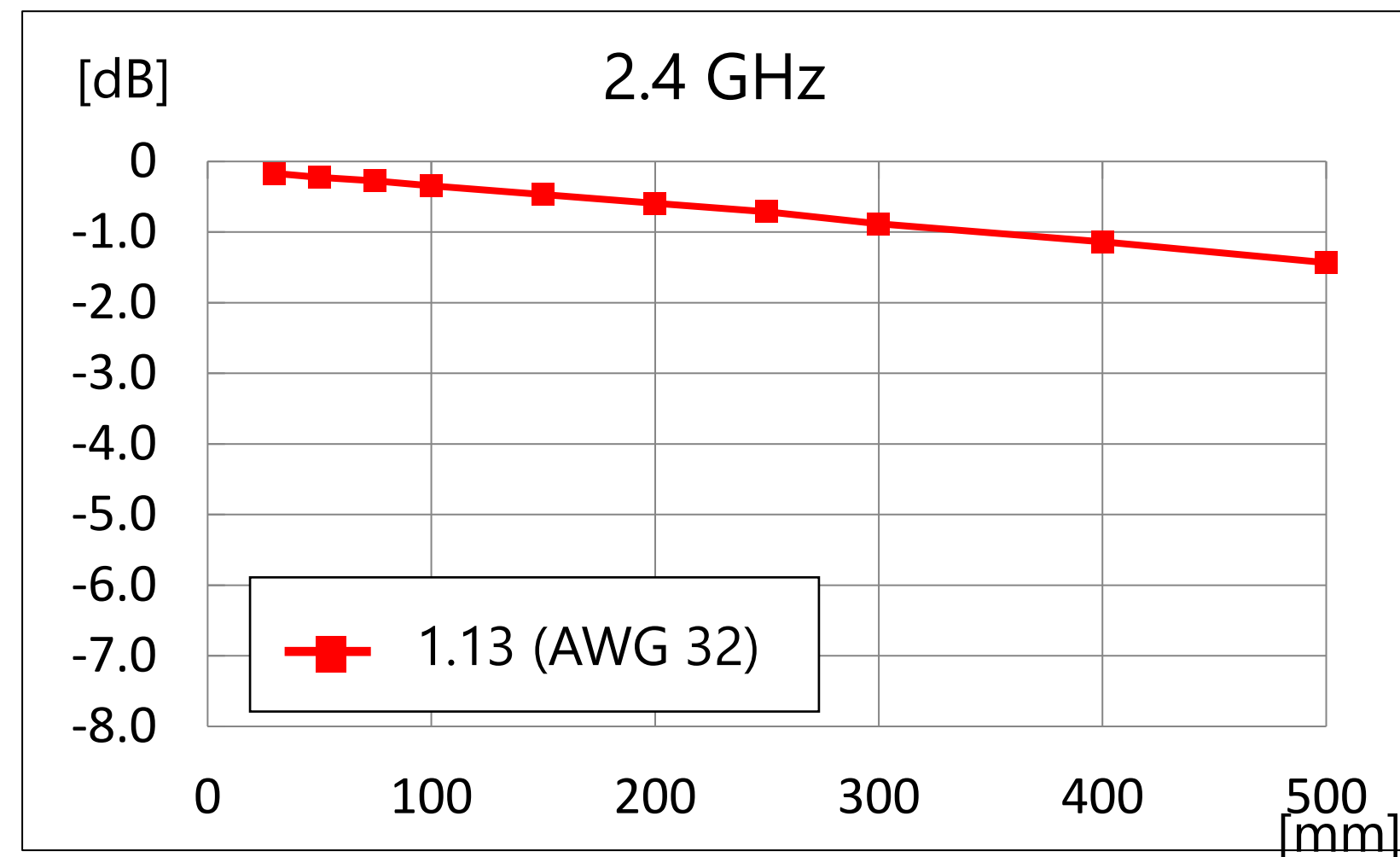
Cable insertion loss : MHF[®] 5L

■ Harness Length (mm) vs Insertion Loss (S21)



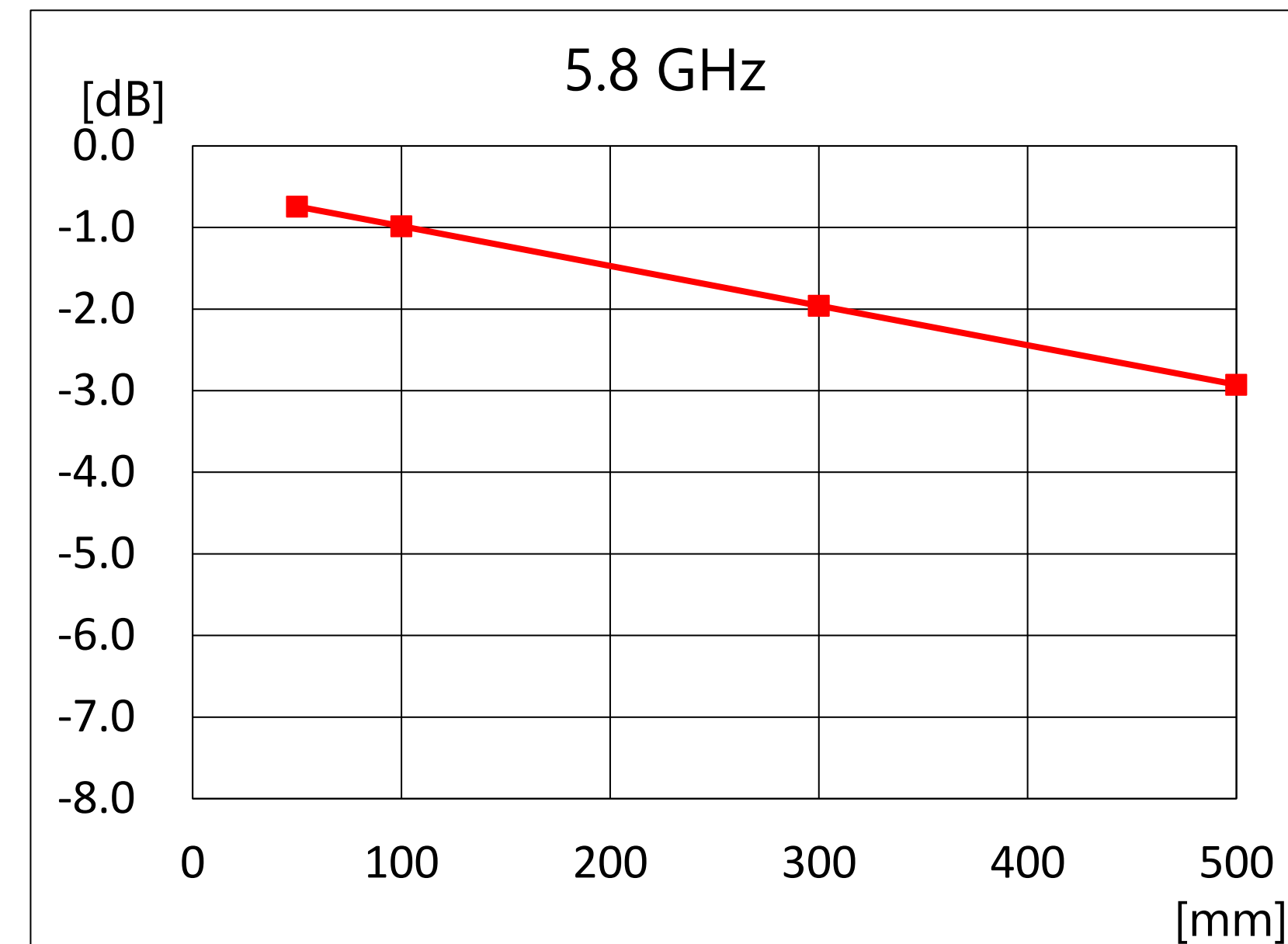
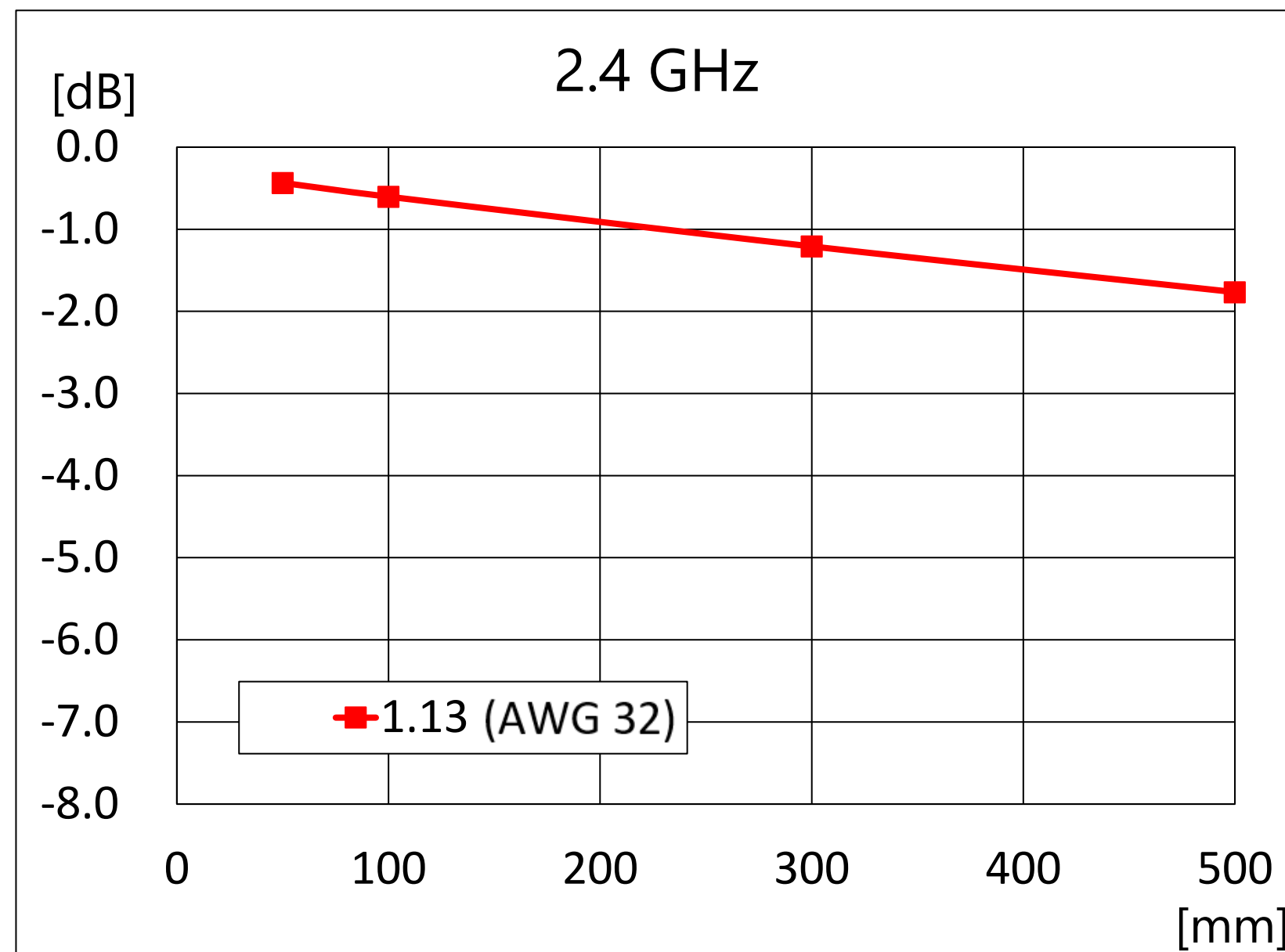
Cable insertion loss : MHF[®] 7S

■ Harness Length (mm) vs Insertion Loss (S21)



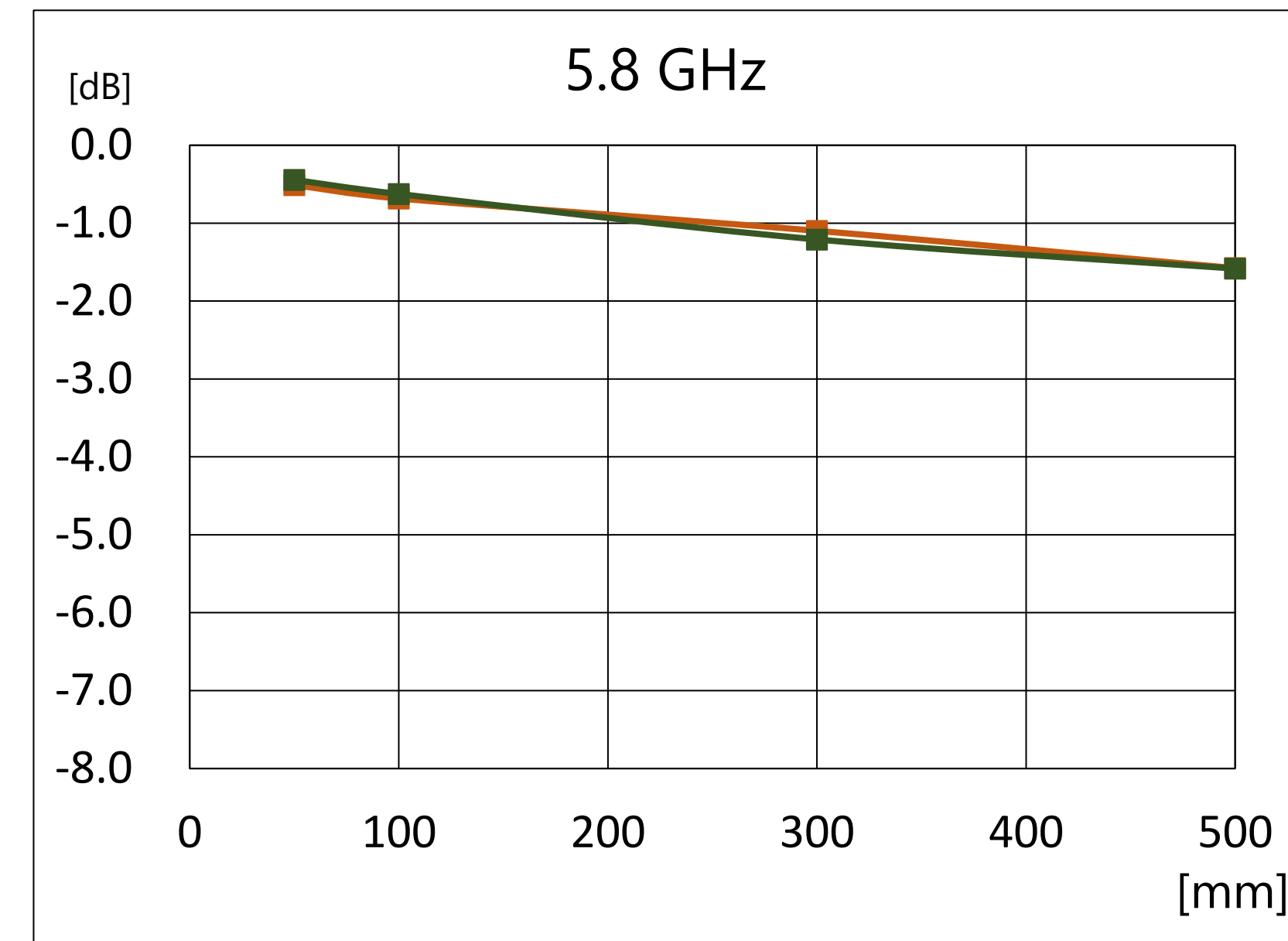
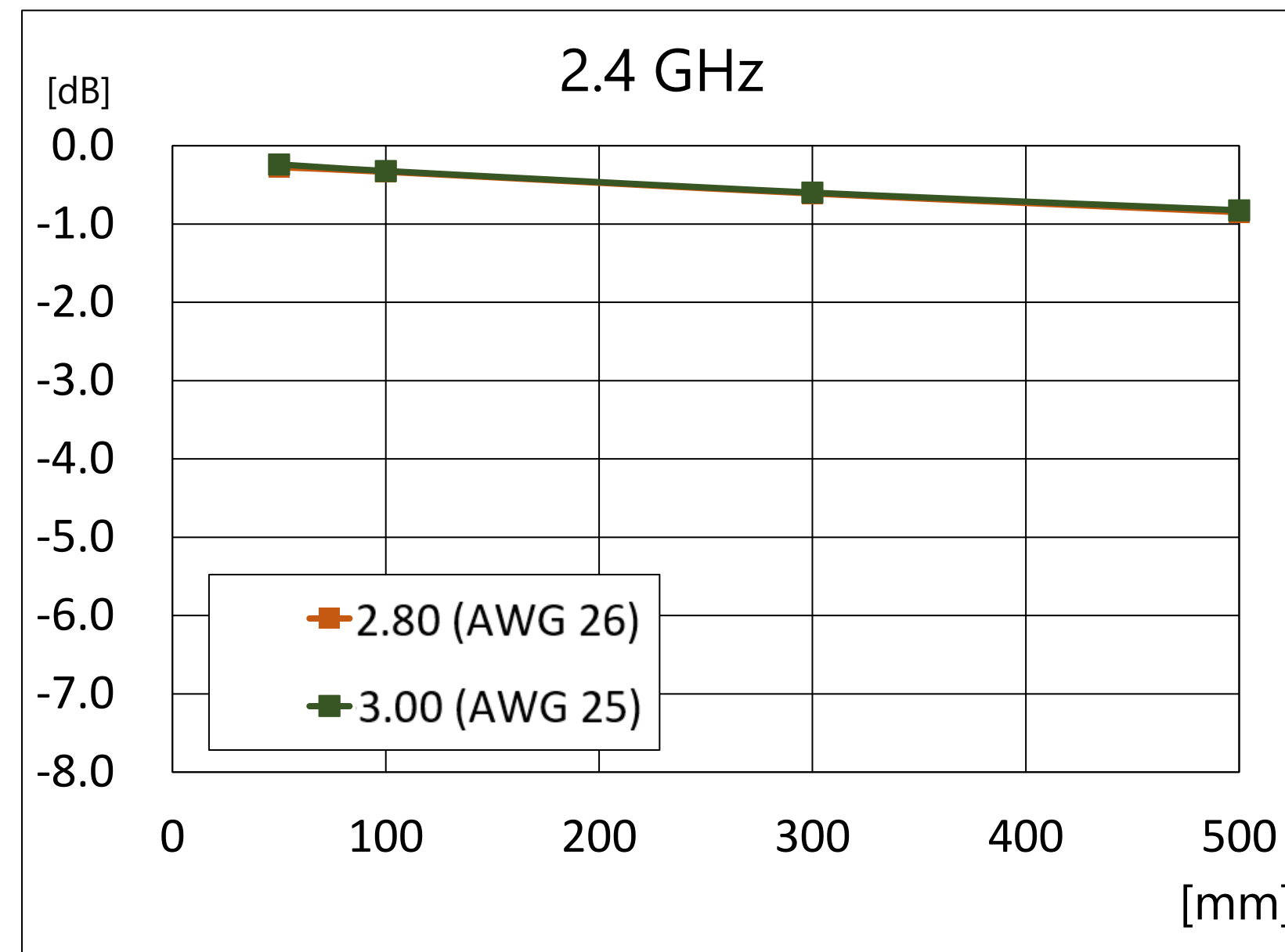
Cable insertion loss : MHF[®]-SW23

■ Harness Length (mm) vs Insertion Loss (S21)

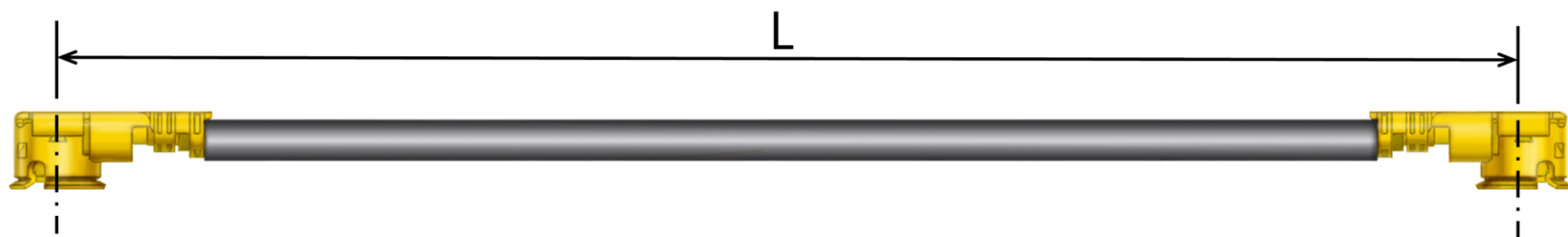


Cable insertion loss : MHF[®]-TI

■ Harness Length (mm) vs Insertion Loss (S21)

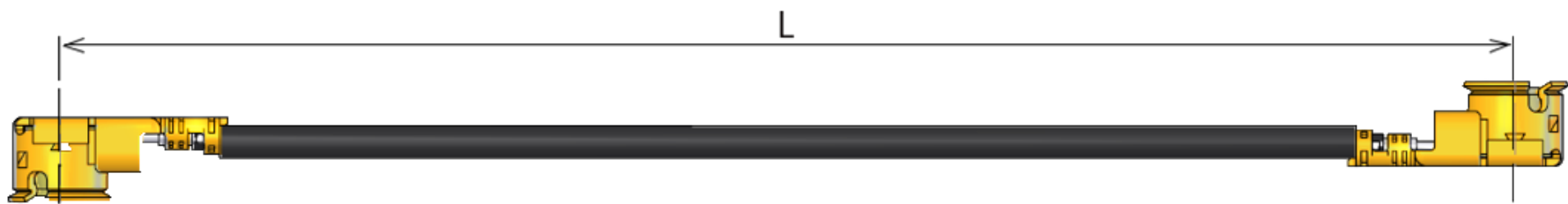


MHF® I standard harness



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-I harness OD=0.81mm L=100mm	8-25-0819	Buy from Digikey
MHF I-I harness OD=0.81mm L=200mm	8-25-0820	Buy from Digikey
MHF I-I harness OD=0.81mm L=500mm	8-25-0823	Buy from Digikey
MHF I-I harness OD=1.13mm L=50mm	8-24-0113	Buy from Digikey
MHF I-I harness OD=1.13mm L=100mm	8-24-0114	Buy from Digikey
MHF I-I harness OD=1.13mm L=200mm	8-21-0048	Buy from Digikey
MHF I-I harness OD=1.13mm L=500mm	8-24-0115	Buy from Digikey
MHF I-I harness OD=1.32mm L=100mm	8-25-0814	Buy from Digikey
MHF I-I harness OD=1.32mm L=200mm	8-25-0815	Buy from Digikey
MHF I-I harness OD=1.32mm L=500mm	8-25-0818	Buy from Digikey
MHF I-I harness OD=1.37mm L=50mm	8-24-0140	Buy from Digikey
MHF I-I harness OD=1.37mm L=100mm	8-24-0141	Buy from Digikey
MHF I-I harness OD=1.37mm L=200mm	8-24-0142	Buy from Digikey
MHF I-I harness OD=1.37mm L=500mm	8-24-0143	Buy from Digikey
MHF I-I harness OD=1.80mm L=100mm	8-25-0858	Buy from Digikey
MHF I-I harness OD=1.80mm L=200mm	8-25-0859	Buy from Digikey
MHF I-I harness OD=1.80mm L=500mm	8-25-0862	Buy from Digikey

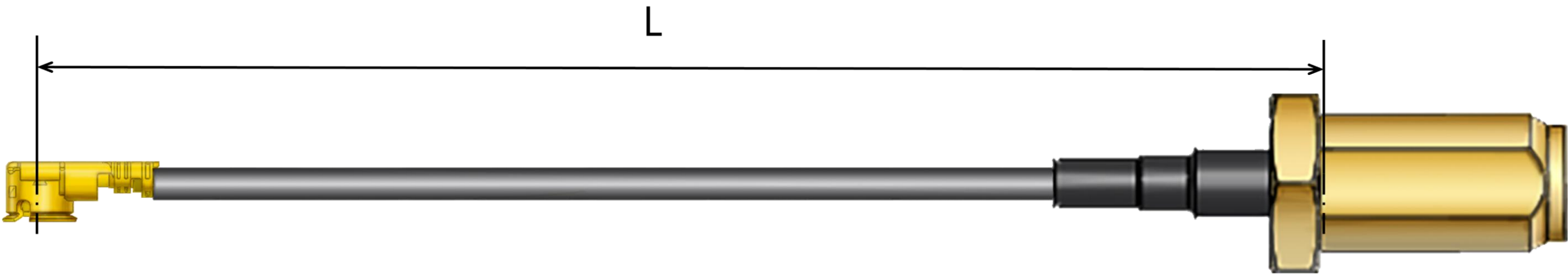
- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-I harness OD=0.81mm L=100mm 180 degree orientation	8-25-0832	Buy from Digikey
MHF I-I harness OD=0.81mm L=200mm 180 degree orientation	8-25-0833	Buy from Digikey
MHF I-I harness OD=1.13mm L=100mm 180 degree orientation	8-25-0827	Buy from Digikey
MHF I-I harness OD=1.13mm L=200mm 180 degree orientation	8-25-0828	Buy from Digikey
MHF I-I harness OD=1.32mm L=100mm 180 degree orientation	8-25-0837	Buy from Digikey
MHF I-I harness OD=1.32mm L=200mm 180 degree orientation	8-25-0838	Buy from Digikey
MHF I-I harness OD=1.37mm L=100mm 180 degree orientation	8-25-0845	Buy from Digikey
MHF I-I harness OD=1.37mm L=200mm 180 degree orientation	8-25-0846	Buy from Digikey
MHF I-I harness OD=1.80mm L=100mm 180 degree orientation	8-25-0853	Buy from Digikey
MHF I-I harness OD=1.80mm L=200mm 180 degree orientation	8-25-0854	Buy from Digikey

MHF® I standard harness

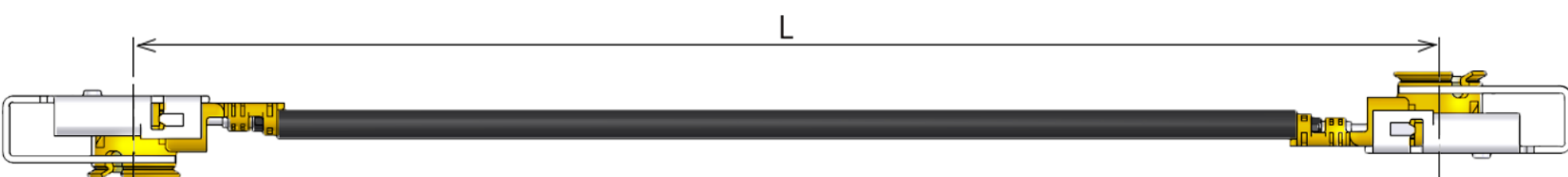
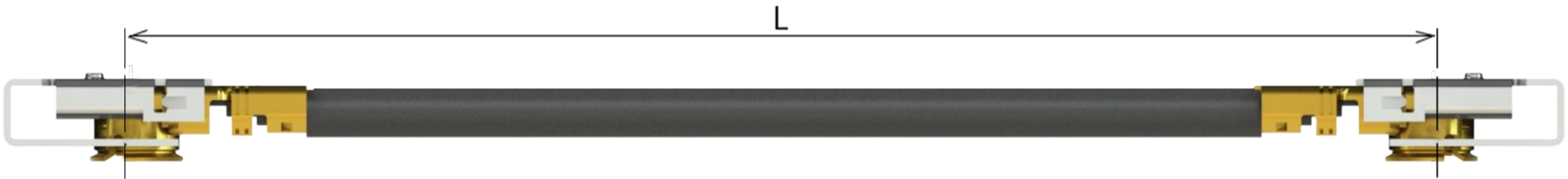
- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF I-SMA Jack harness OD=1.13mm L=100mm	8-25-0046	Buy from Digikey
MHF I-SMA Jack harness OD=1.13mm L=150mm	8-25-0047	Buy from Digikey
MHF I-SMA Jack harness OD=1.13mm L=200mm	8-25-0048	Buy from Digikey
MHF I-SMA Jack harness OD=1.37mm L=100mm	8-25-0066	Buy from Digikey
MHF I-SMA Jack harness OD=1.37mm L=150mm	8-25-0067	Buy from Digikey
MHF I-SMA Jack harness OD=1.37mm L=200mm	8-25-0068	Buy from Digikey

MHF® | LK standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.

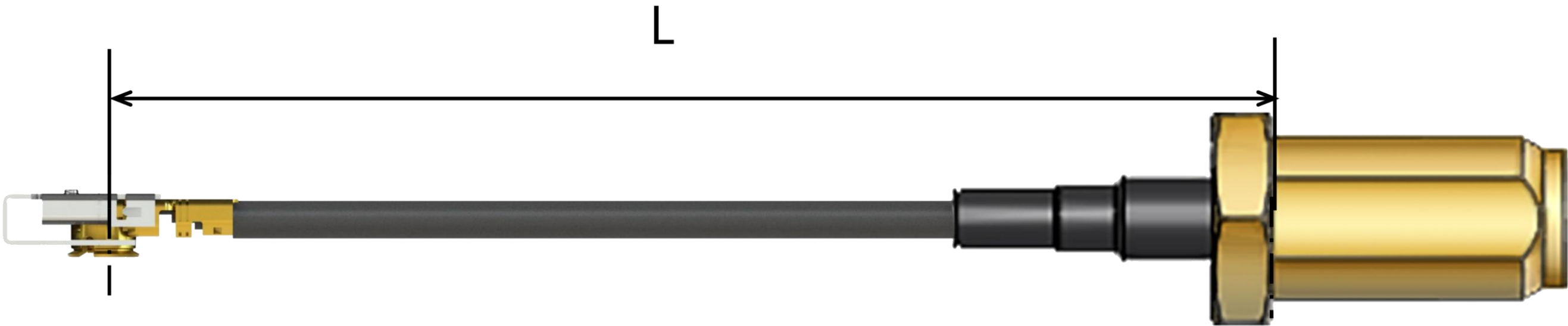


Part Number Description	Part Number (Link to Drawing)	Sample available
MHF LK-I LK harness OD=0.81mm L=100mm	8-25-0458	Buy from Digikey
MHF LK-I LK harness OD=0.81mm L=200mm	8-25-0459	Buy from Digikey
MHF LK-I LK harness OD=0.81mm L=500mm	8-25-0460	Buy from Digikey
MHF LK-I LK harness OD=1.13mm L=100mm	8-23-0118	Buy from Digikey
MHF LK-I LK harness OD=1.13mm L=200mm	8-21-0047	Buy from Digikey
MHF LK-I LK harness OD=1.13mm L=500mm	8-23-0120	Buy from Digikey
MHF LK-I LK harness OD=1.32mm L=100mm	8-25-0452	Buy from Digikey
MHF LK-I LK harness OD=1.32mm L=200mm	8-25-0453	Buy from Digikey
MHF LK-I LK harness OD=1.32mm L=500mm	8-25-0454	Buy from Digikey
MHF LK-I LK harness OD=1.37mm L=100mm	8-23-0119	Buy from Digikey
MHF LK-I LK harness OD=1.37mm L=200mm	8-21-0049	Buy from Digikey
MHF LK-I LK harness OD=1.37mm L=500mm	8-23-0121	Buy from Digikey
MHF LK-I LK harness OD=1.80mm L=100mm	8-25-0443	Buy from Digikey
MHF LK-I LK harness OD=1.80mm L=200mm	8-25-0444	Buy from Digikey
MHF LK-I LK harness OD=1.80mm L=500mm	8-25-0445	Buy from Digikey

Part Number Description	Part Number (Link to Drawing)	Sample available
MHF LK-I LK harness OD=0.81mm L=100mm 180 degree orientation	8-25-0880	Buy from Digikey
MHF LK-I LK harness OD=0.81mm L=200mm 180 degree orientation	8-25-0881	Buy from Digikey
MHF LK-I LK harness OD=1.13mm L=100mm 180 degree orientation	8-25-0864	Buy from Digikey
MHF LK-I LK harness OD=1.13mm L=200mm 180 degree orientation	8-25-0865	Buy from Digikey
MHF LK-I LK harness OD=1.32mm L=100mm 180 degree orientation	8-25-0891	Buy from Digikey
MHF LK-I LK harness OD=1.32mm L=200mm 180 degree orientation	8-25-0892	Buy from Digikey
MHF LK-I LK harness OD=1.37mm L=100mm 180 degree orientation	8-25-0901	Buy from Digikey
MHF LK-I LK harness OD=1.37mm L=200mm 180 degree orientation	8-25-0902	Buy from Digikey
MHF LK-I LK harness OD=1.80mm L=100mm 180 degree orientation	8-25-0917	Buy from Digikey
MHF LK-I LK harness OD=1.80mm L=200mm 180 degree orientation	8-25-0918	Buy from Digikey

MHF® | LK standard harness

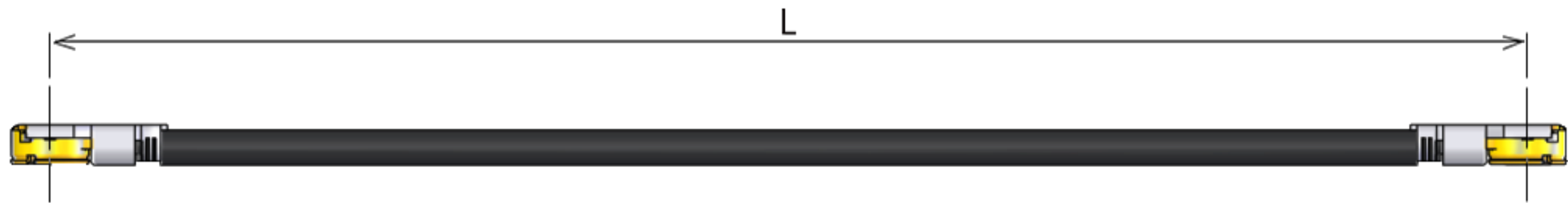
- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF LK-SMA Jack harness OD=1.13mm L=100mm	8-25-0049	Buy from Digikey
MHF LK-SMA Jack harness OD=1.13mm L=150mm	8-25-0050	Buy from Digikey
MHF LK-SMA Jack harness OD=1.13mm L=200mm	8-25-0051	Buy from Digikey
MHF LK-SMA Jack harness OD=1.37mm L=100mm	8-25-0069	Buy from Digikey
MHF LK-SMA Jack harness OD=1.37mm L=150mm	8-25-0070	Buy from Digikey
MHF LK-SMA Jack harness OD=1.37mm L=200mm	8-25-0071	Buy from Digikey

MHF® 4 standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.

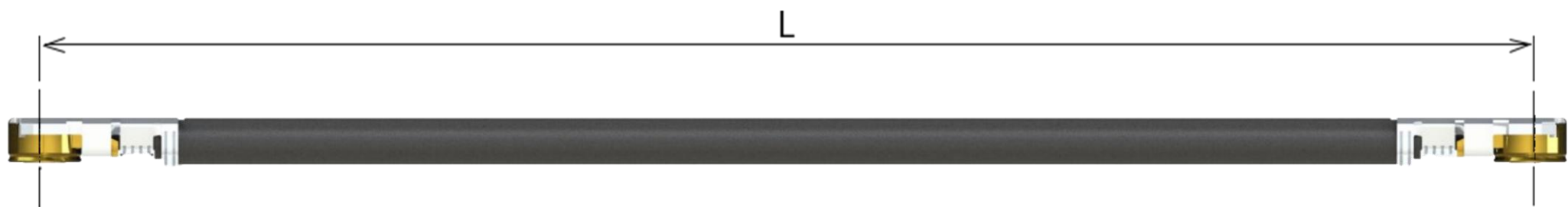


Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4-4 harness OD=0.81mm L=100mm	8-25-0886	Buy from Digikey
MHF 4-4 harness OD=0.81mm L=200mm	8-25-0887	Buy from Digikey
MHF 4-4 harness OD=0.81mm L=500mm	8-25-0890	Buy from Digikey



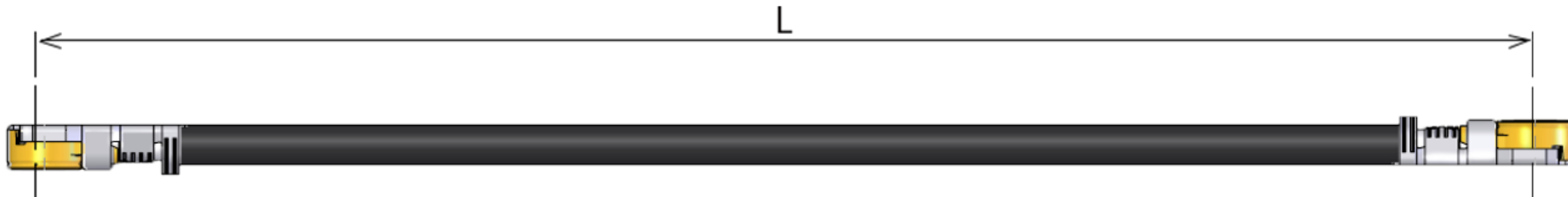
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4-4 harness OD=0.81mm L=100mm 180 degree orientation	8-25-0912	Buy from Digikey
MHF 4-4 harness OD=0.81mm L=200mm 180 degree orientation	8-25-0913	Buy from Digikey

MHF® 4L standard harness



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4L-4L harness OD=0.64mm L=50mm	8-25-0437	Buy from Digikey
MHF 4L-4L harness OD=0.64mm L=100mm	8-25-0438	Buy from Digikey
MHF 4L-4L harness OD=0.64mm L=200mm	8-25-0439	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=50mm	8-25-0466	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=100mm	8-25-0467	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=200mm	8-21-0042	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=500mm	8-25-0928	Buy from Digikey
MHF 4L-4L harness OD=0.95mm L=100mm	8-25-0953	Buy from Digikey
MHF 4L-4L harness OD=0.95mm L=200mm	8-25-0954	Buy from Digikey
MHF 4L-4L harness OD=0.95mm L=500mm	8-25-0957	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=50mm	8-23-0115	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=100mm	8-23-0112	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=200mm	8-21-0043	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=500mm	8-24-0128	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=50mm	8-23-0116	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=100mm	8-23-0113	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=200mm	8-23-0114	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=500mm	8-24-0129	Buy from Digikey

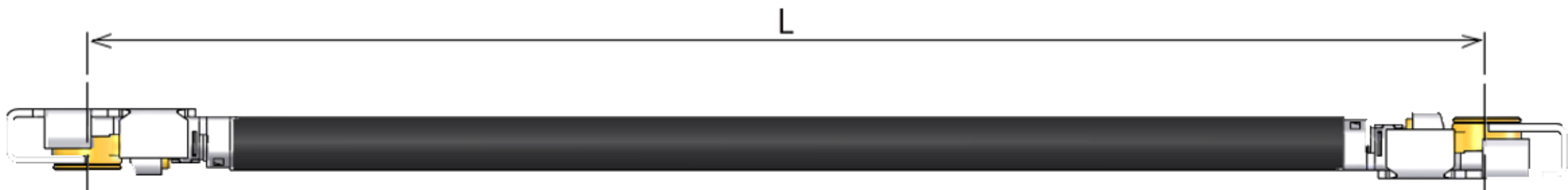
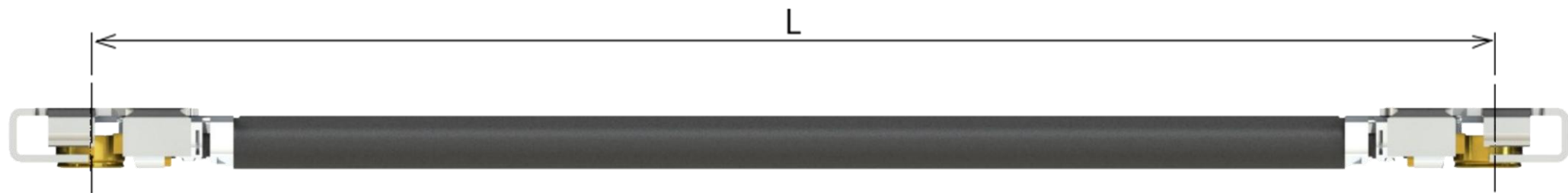
- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4L-4L harness OD=0.64mm L=100mm 180 degree orientation	8-25-0923	Buy from Digikey
MHF 4L-4L harness OD=0.64mm L=200mm 180 degree orientation	8-25-0924	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=100mm 180 degree orientation	8-25-0935	Buy from Digikey
MHF 4L-4L harness OD=0.81mm L=200mm 180 degree orientation	8-25-0936	Buy from Digikey
MHF 4L-4L harness OD=0.95mm L=100mm 180 degree orientation	8-25-0972	Buy from Digikey
MHF 4L-4L harness OD=0.95mm L=200mm 180 degree orientation	8-25-0973	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=100mm 180 degree orientation	8-25-0948	Buy from Digikey
MHF 4L-4L harness OD=1.13mm L=200mm 180 degree orientation	8-25-0949	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=100mm 180 degree orientation	8-25-0960	Buy from Digikey
MHF 4L-4L harness OD=1.37mm L=200mm 180 degree orientation	8-25-0961	Buy from Digikey

MHF® 4L LK standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.

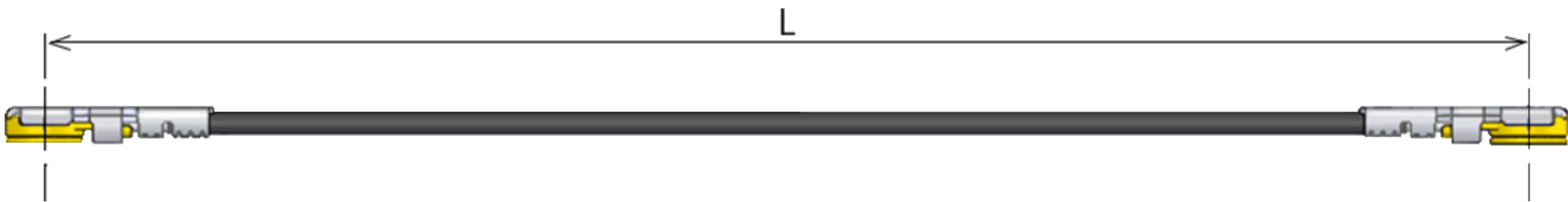


Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4L LK-4L LK harness OD= 1.37mm L=100mm	8-23-0110	Buy from Digikey
MHF 4L LK-4L LK harness OD= 1.37mm L=200mm	8-21-0044	Buy from Digikey
MHF 4L LK-4L LK harness OD= 1.37mm L=500mm	8-23-0111	Buy from Digikey

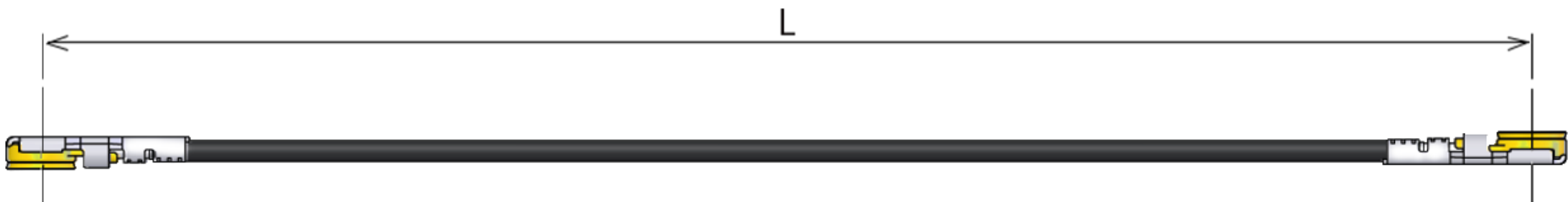
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 4L LK-4L LK harness OD= 1.37mm L=100mm 180 degree orientation	8-25-0978	Buy from Digikey
MHF 4L LK-4L LK harness OD= 1.37mm L=200mm 180 degree orientation	8-25-0979	Buy from Digikey

MHF® 5 standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



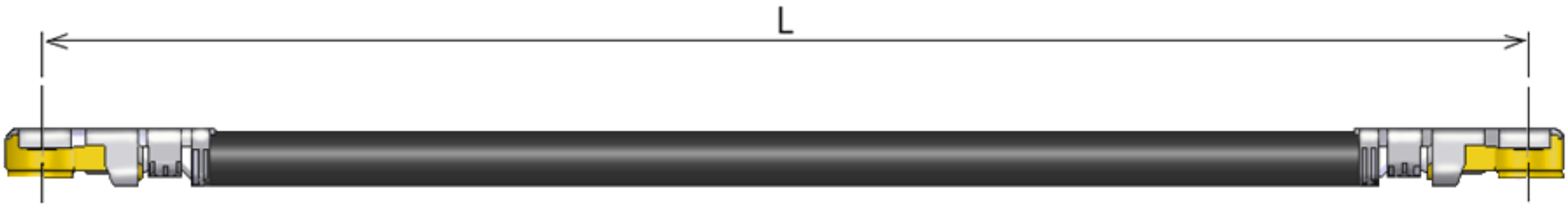
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 5-5 harness OD=0.48mm L=50mm	8-25-0471	Buy from Digikey
MHF 5-5 harness OD=0.48mm L=100mm	8-25-0472	Buy from Digikey
MHF 5-5 harness OD=0.48mm L=200mm	8-25-0473	Buy from Digikey
MHF 5-5 harness OD=0.64mm L=50mm	8-25-0432	Buy from Digikey
MHF 5-5 harness OD=0.64mm L=100mm	8-21-0045	Buy from Digikey
MHF 5-5 harness OD=0.64mm L=200mm	8-25-0433	Buy from Digikey
MHF 5-5 harness OD=0.81mm L=100mm	8-25-0869	Buy from Digikey
MHF 5-5 harness OD=0.81mm L=200mm	8-25-0870	Buy from Digikey
MHF 5-5 harness OD=0.81mm L=500mm	8-25-0873	Buy from Digikey



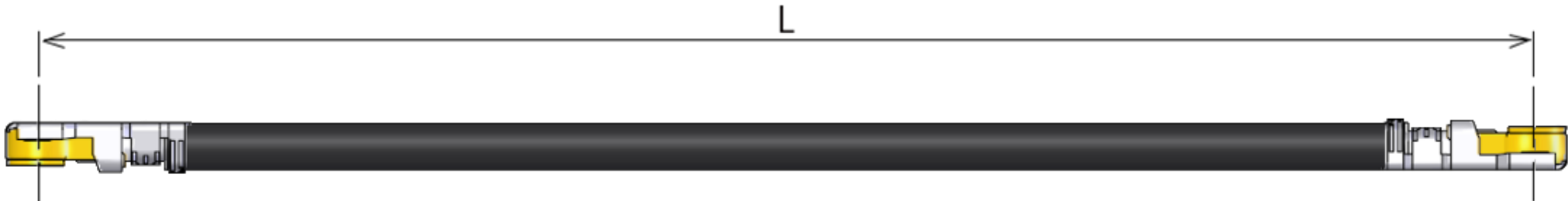
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 5-5 harness OD=0.48mm L=100mm 180 degree orientation	8-25-0984	Buy from Digikey
MHF 5-5 harness OD=0.48mm L=200mm 180 degree orientation	8-25-0985	Buy from Digikey
MHF 5-5 harness OD=0.64mm L=100mm 180 degree orientation	8-25-0878	Buy from Digikey
MHF 5-5 harness OD=0.64mm L=200mm 180 degree orientation	8-25-0879	Buy from Digikey
MHF 5-5 harness OD=0.81mm L=100mm 180 degree orientation	8-25-0896	Buy from Digikey
MHF 5-5 harness OD=0.81mm L=200mm 180 degree orientation	8-25-0897	Buy from Digikey

MHF® 5L standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



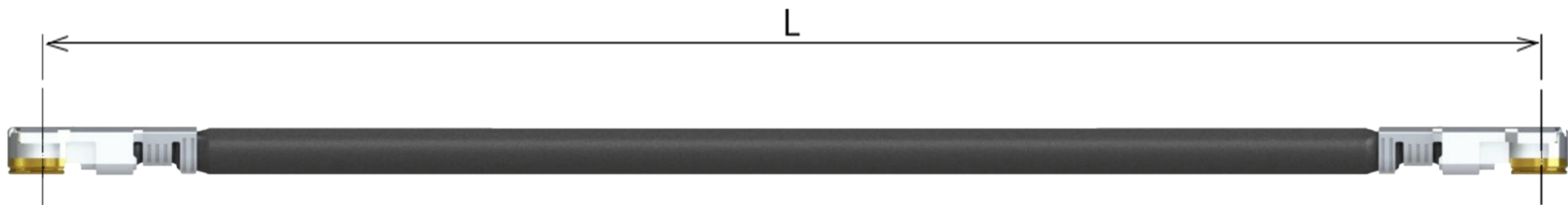
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 5L-5L harness OD=0.84mm L=100mm	8-25-0929	Buy from Digikey
MHF 5L-5L harness OD=0.84mm L=200mm	8-25-0930	Buy from Digikey
MHF 5L-5L harness OD=0.84mm L=500mm	8-25-0933	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=50mm	8-24-0146	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=100mm	8-24-0147	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=200mm	8-24-0148	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=500mm	8-24-0149	Buy from Digikey



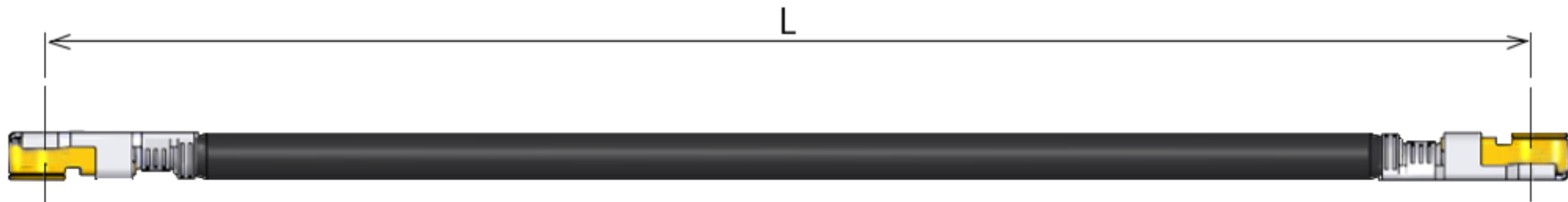
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 5L-5L harness OD=0.84mm L=100mm 180 degree orientation	8-25-0967	Buy from Digikey
MHF 5L-5L harness OD=0.84mm L=200mm 180 degree orientation	8-25-0968	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=100mm 180 degree orientation	8-25-0907	Buy from Digikey
MHF 5L-5L harness OD=1.13mm L=200mm 180 degree orientation	8-25-0908	Buy from Digikey

MHF® 7S standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



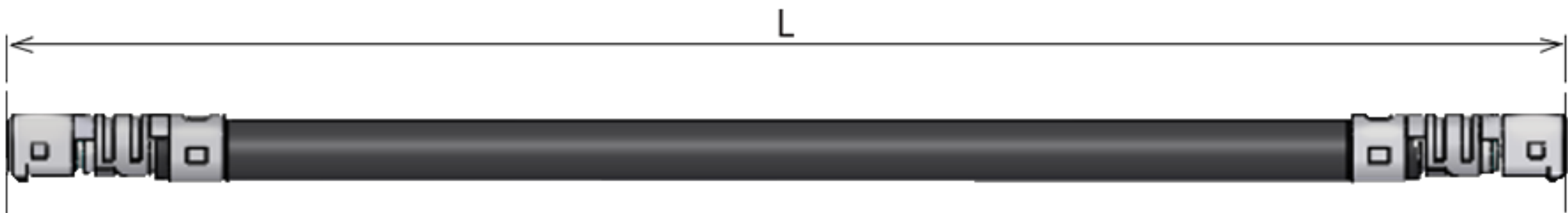
Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 7S-7S harness OD=1.13mm L=50mm	8-24-0162	Buy from Digikey
MHF 7S-7S harness OD=1.13mm L=100mm	8-22-0127	Buy from Digikey
MHF 7S-7S harness OD=1.13mm L=150mm	8-23-0117	Buy from Digikey
MHF 7S-7S harness OD=1.13mm L=200mm	8-21-0046	Buy from Digikey
MHF 7S-7S harness OD=1.13mm L=500mm	8-24-0163	Buy from Digikey



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF 7S-7S harness OD=1.13mm L=100mm 180 degree orientation	8-25-0941	Buy from Digikey
MHF 7S-7S harness OD=1.13mm L=200mm 180 degree orientation	8-25-0943	Buy from Digikey

MHF® -TI standard harness

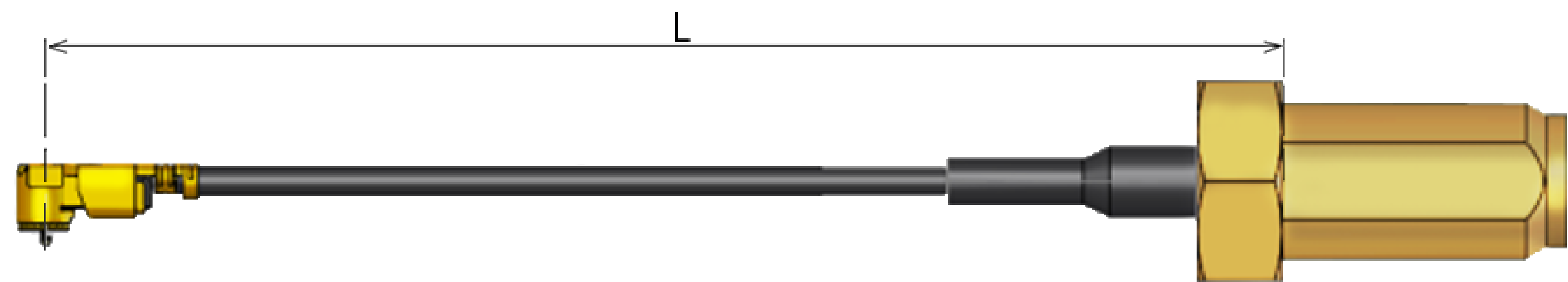
- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF-TI-TI harness OD=2.80mm L=500mm	8-24-0161	Buy from Digikey
MHF-TI-TI harness OD=2.80mm L=1,000mm	8-25-0153	Buy from Digikey
MHF-TI-TI harness OD=3.00mm L=500mm	8-24-0238	Buy from Digikey
MHF-TI-TI harness OD=3.00mm L=1,000mm	8-25-0154	Buy from Digikey

MHF ® -SW23 PLUG standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
MHF-SW23-SMA Jack harness OD=1.13mm L=100mm	8-25-0540	Buy from Digikey
MHF-SW23-SMA Jack harness OD=1.13mm L=150mm	8-25-0541	Buy from Digikey
MHF-SW23-SMA Jack harness OD=1.13mm L=200mm	8-25-0542	Buy from Digikey

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