

MHF® III

低輪廓設計，最大組合高度1.6，支持可達6 GHz

Product Specifications:

Mated Height (mm max.)	1.6	
Rece. SMT Size (mm)	2.0 x 2.0	
Applicable Frequency	DC~6 GHz	
Characteristic Impedance	50 ohm	
VSWR (L=100 mm)	DC~3 GHz	1.3 max.
	3~6 GHz	1.5 max.
	6~9 GHz	-
	9~12 GHz	-
	12~15 GHz	-

Applicable Cable Size:

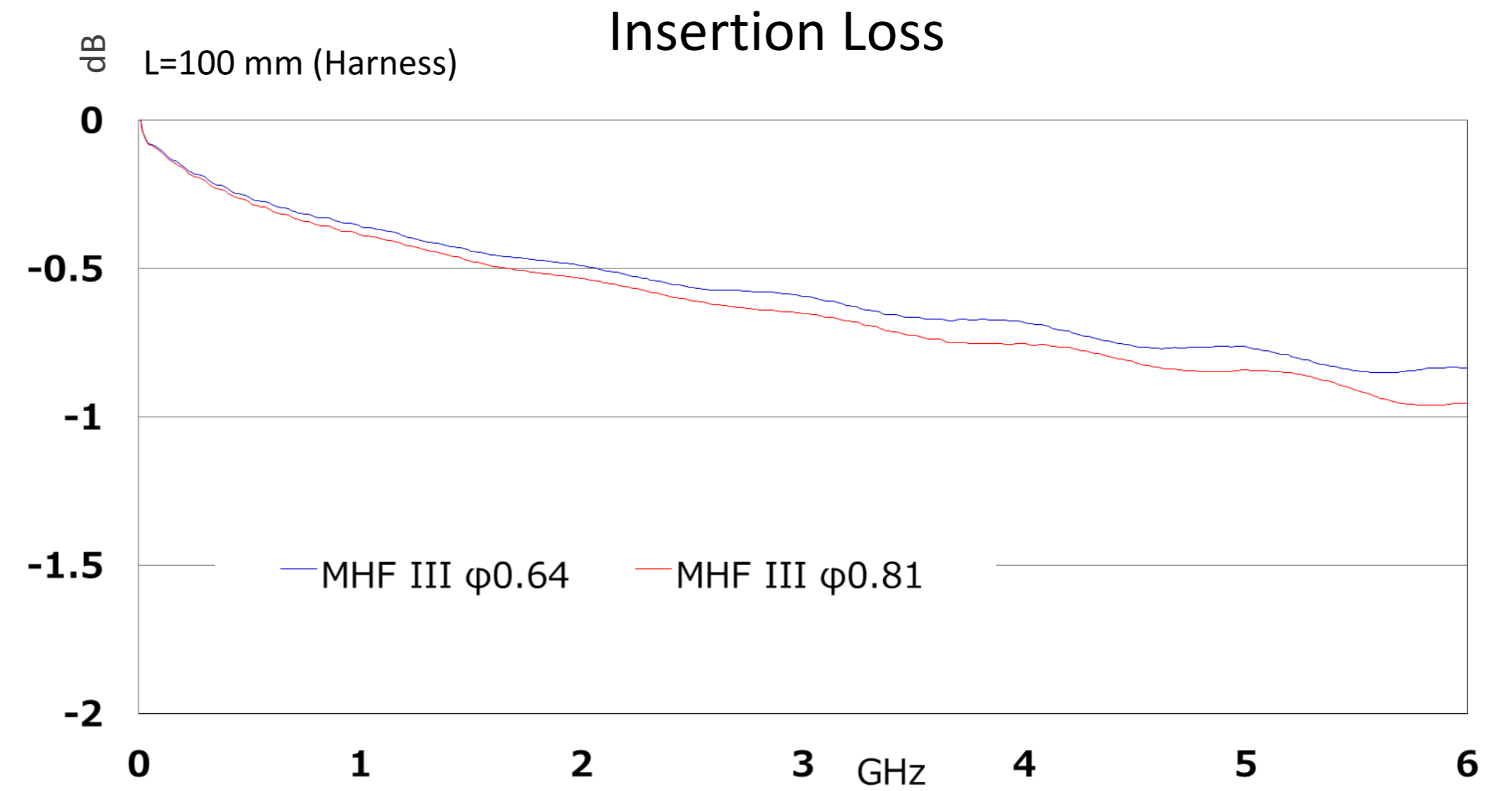
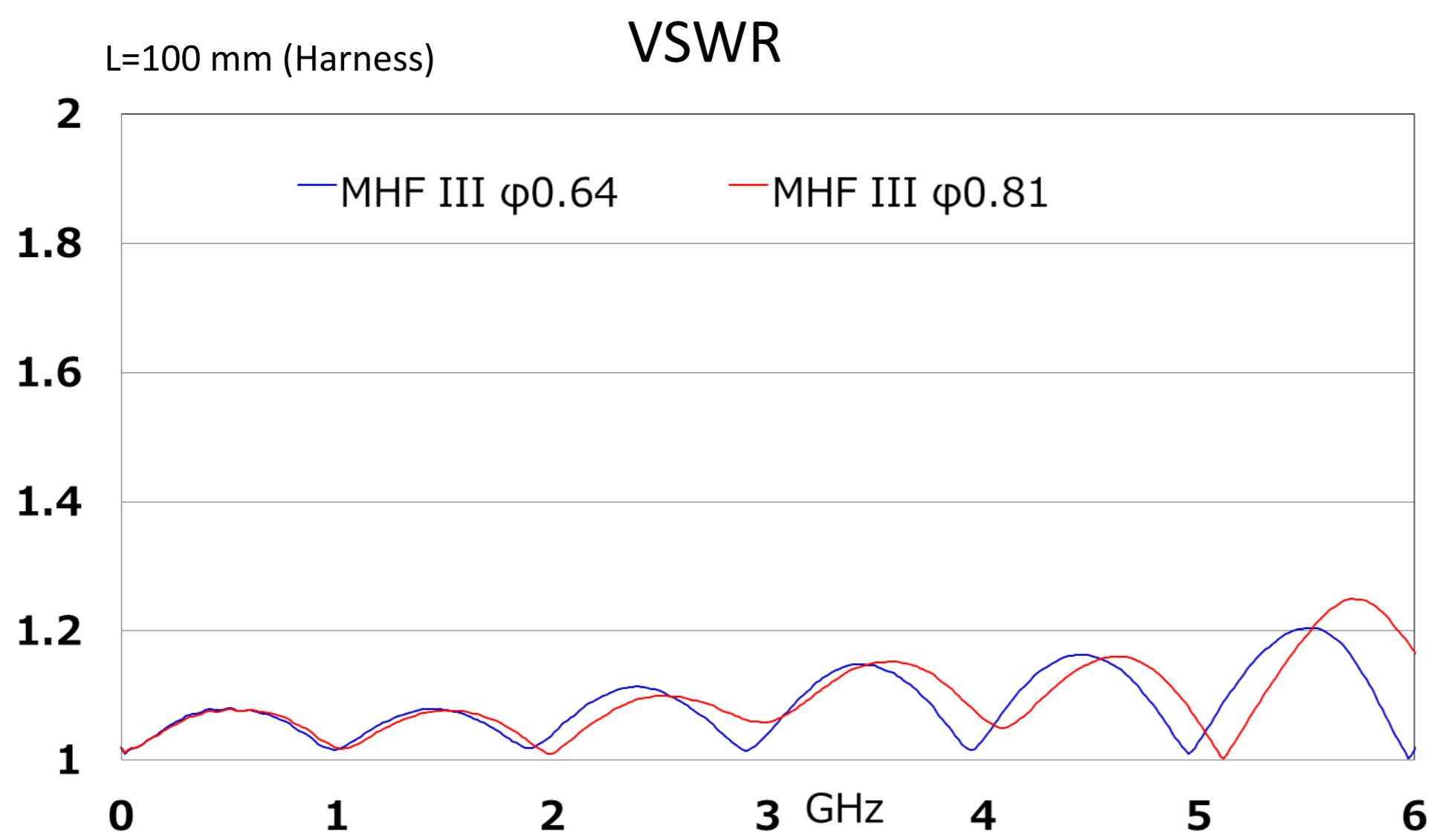
O.D. 0.81 mm / AWG 36
O.D. 0.64 mm / AWG 36

Applicable Standards (Reference Only):

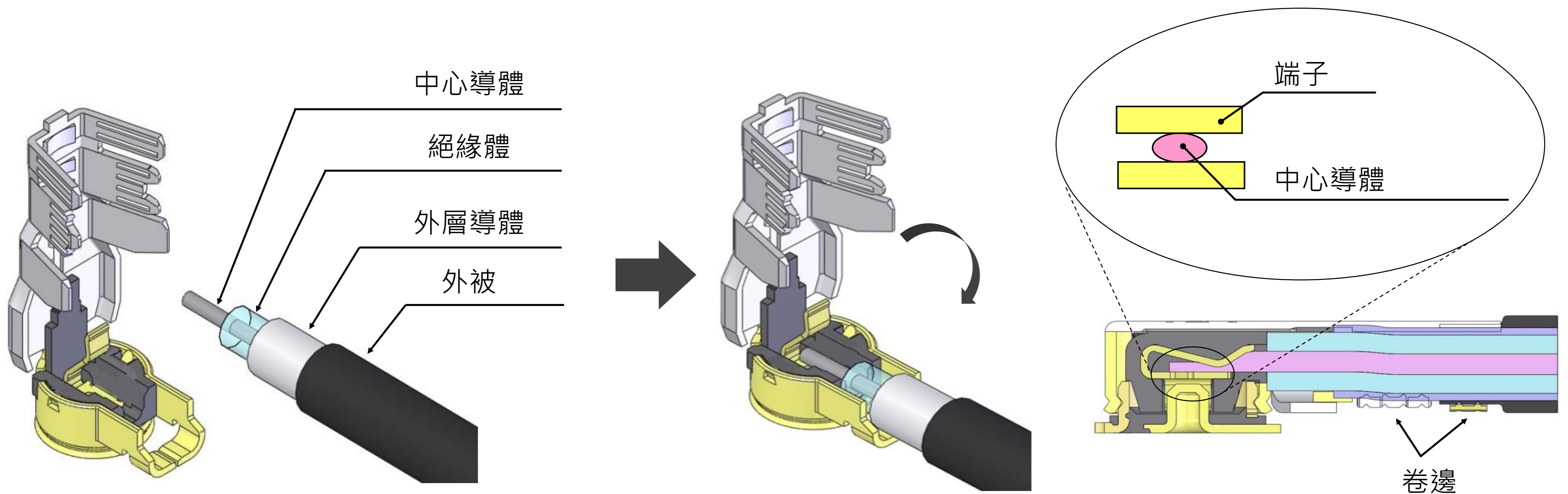
5G sub-6, Wi-Fi 6, LTE/LTE-Advanced, LPWA, Bluetooth, GPS



▶ 對應6 GHz 的高性能小型連接器



▶ 使用“i-Fit®”技術的無焊料極細同軸線端子



▶ MHF® III 公座適用的極細同軸線外徑(AWG) : 0.81 mm (36), 0.64 mm (36)

Product name	MHF® III	MHF® 4L		MHF® I	
Mating Height	1.6 mm max.	1.7 mm max.	1.4 mm max.	1.2 mm max.	3.0 mm max. / 2.5 mm max.
Coax O.D. (Center Conductor AWG)	2.00 mm (AWG#26)				●
	1.80 mm (AWG#30)				●
	1.37 mm (AWG#30)		●		●
	1.32 mm (AWG#32)				●
	1.13 mm (AWG#32)			●	●
	0.95 mm (AWG#33)			●	●
	0.81 mm (AWG#36)	●			●
0.64 mm (AWG#36)	●			●	
Receptacle	MHF III receptacle	MHF 4 receptacle, MHF 4L receptacle		MHF I receptacle	

MHF® III plug Ni top

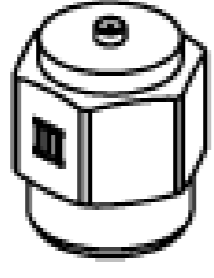
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20369-001E
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC ~ 9 GHz
OPERATING TEMPERATURE	233 ~ 363 K(-40°C ~ +90°C)
VSWR (MATED WITH SMA ADAPTER PART No. 90285-001)	1.30 MAX. AT 0.1~3 GHz, 1.50 MAX. AT 3~6 GHz, 1.70 MAX. AT 6~9 GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : \leq R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : \leq R100 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC 200 V 1 MINUTE
DURABILITY	30 CYCLES
TOTAL UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER: 2 N MIN.
CRIMP STRENGTH	7 N MIN.
PRODUCT SPECIFICATION	PRS-2107
TEST REPORT	TR-15061
PACKING STANDARD	300-340
INSTRUCTION MANUAL	HIM-07002
APPEARANCE CRITERIA No.	QLS-A***

Rev.2

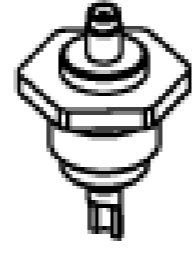
PART NO.	20609-002R			
	<p>MUST NOT USE SOLDER COATED INNER CONDUCTOR AND OUTER CONDUCTOR.</p> <p>B : MAXIMUM LENGTH C : MINIMUM LENGTH 0.35 ± 0.05 = A - C ≠ A - B</p>			
REQUIREMENTS	CHARACTERISTIC IMPEDANCE : 50 OHM BY TDR METHOD NOMINAL CAPACITANCE (REFERENCE VALUE) : 96pF/m CONDUCTOR RESISTANCE OF INNER CONDUCTOR AT 293 K (REFERENCE VALUE) : 1400 OHM/km INSULATION RESISTANCE : 1000 MEGA-OHM.km MIN. DIELECTRIC WITH STANCE VOLTAGE : OD 0.81 TYPE ...NO BREAKDOWN AT AC 1000 V FOR 1 MIN. OD 0.64 TYPE ...NO BREAKDOWN AT AC 500 V FOR 1 MIN.			
BRAIDED SHIELD OF OUTER CONDUCTOR	SINGLE		SINGLE	
P/N OF SEMI AUTO TERMINATION MACHINE	90283-008 SEMI-AUTO		90283-006 SEMI-AUTO	
CRIMP HEIGHT	<p>USE FOR POINT MICROMETER</p> <p>CH-1 (i-Fit® PART) 0.89~0.93</p>		<p>USE FOR POINT MICROMETER</p> <p>CH-2 (JACKET PART) 0.80~0.85</p>	
	<p>USE FOR POINT MICROMETER</p> <p>CH-1 (i-Fit® PART) 0.78~0.82</p>		<p>USE FOR POINT MICROMETER</p> <p>CH-2 (JACKET PART) 0.68~0.72</p>	

Rev.2

Accessories for MHF[®] III plug Ni top



MHF III SMA ADAPTOR
PART NO. 90285-001



MHF III INSPECTION CONNECTOR
PART NO. 90286-001



FRONT SIDE



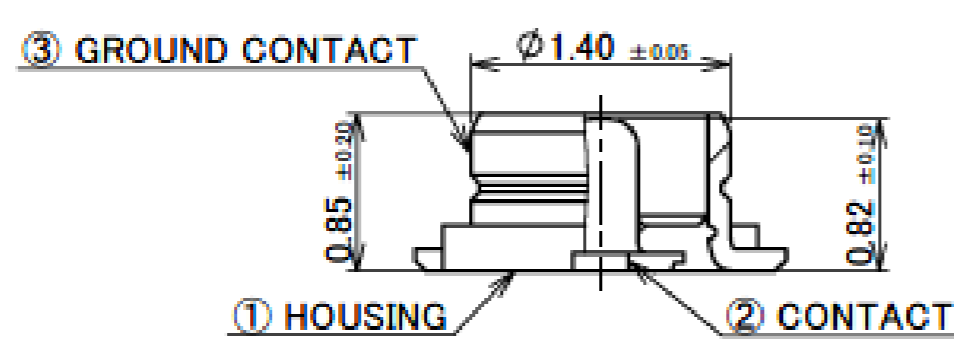
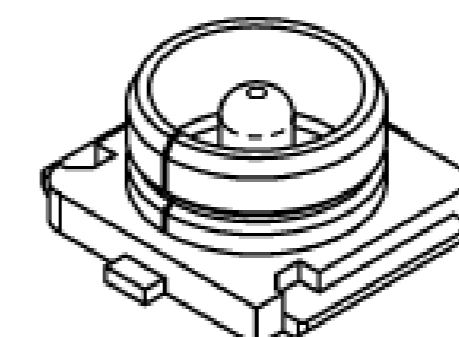
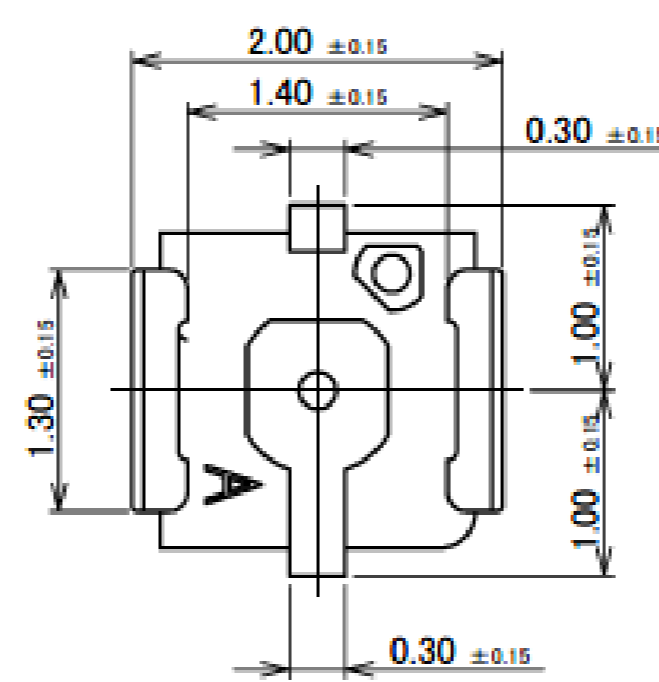
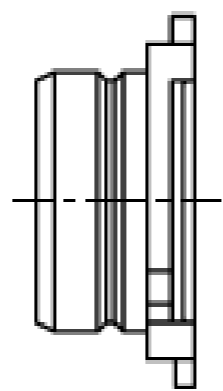
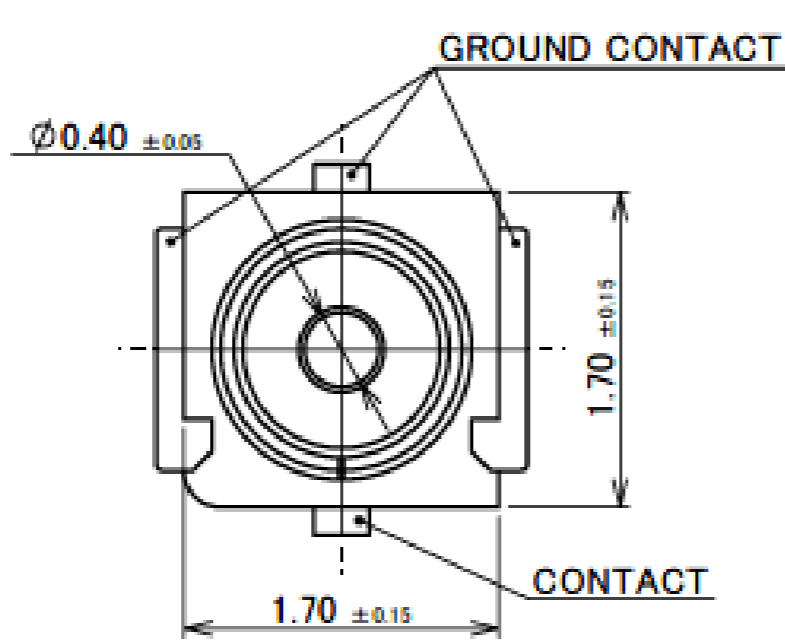
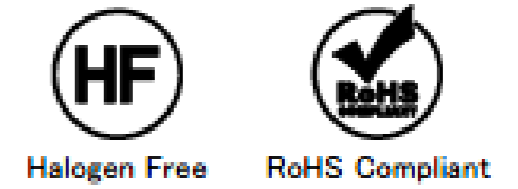
BACK SIDE

MHF III PULLING TOOL
PART NO. 90287-001

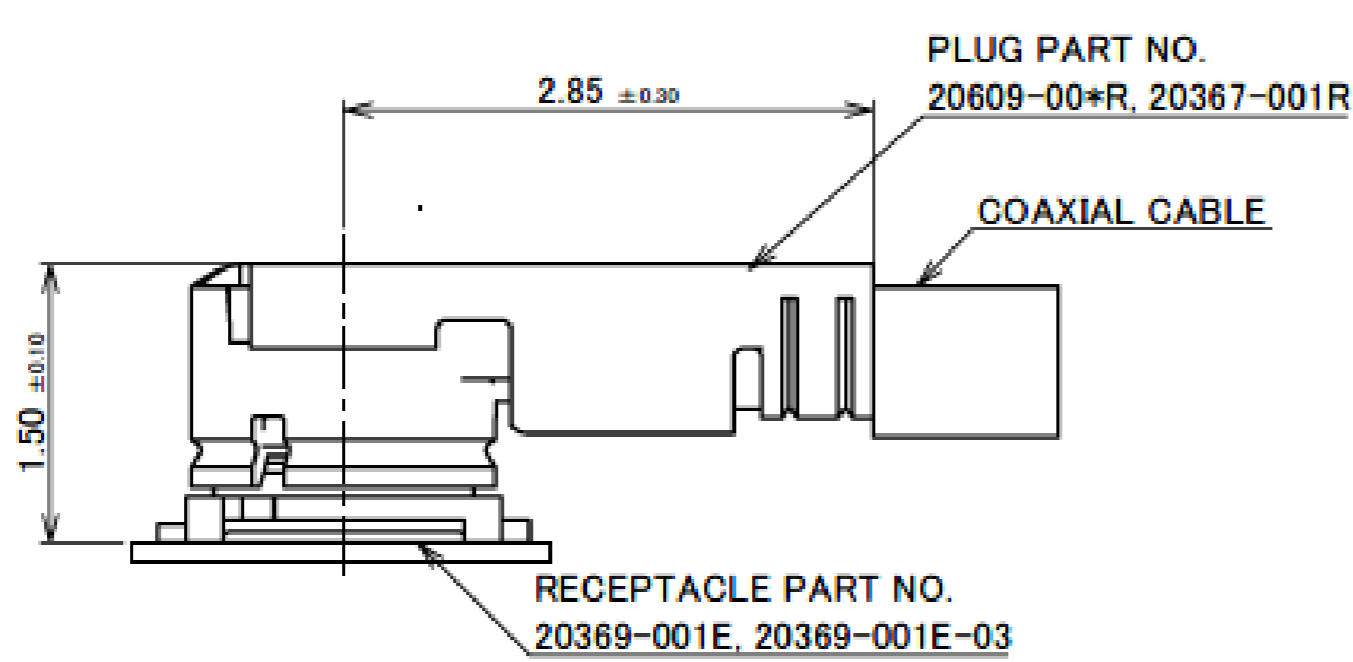
Rev.2

MHF[®] III Receptacle

Recommended P/N		20369-001E-03
PART NO.	PACKING REEL	PACKING QUANTITY
20369-001E	CORRUGATED PAPER REEL	5,000/REEL
20369-001E-03	PLASTIC REEL	



NOTES.
1. APPLICABLE CONNECTOR
20609-00*R
20367-001R
2. COPLANARITY : 0.1MAX.



MATING CONDITION

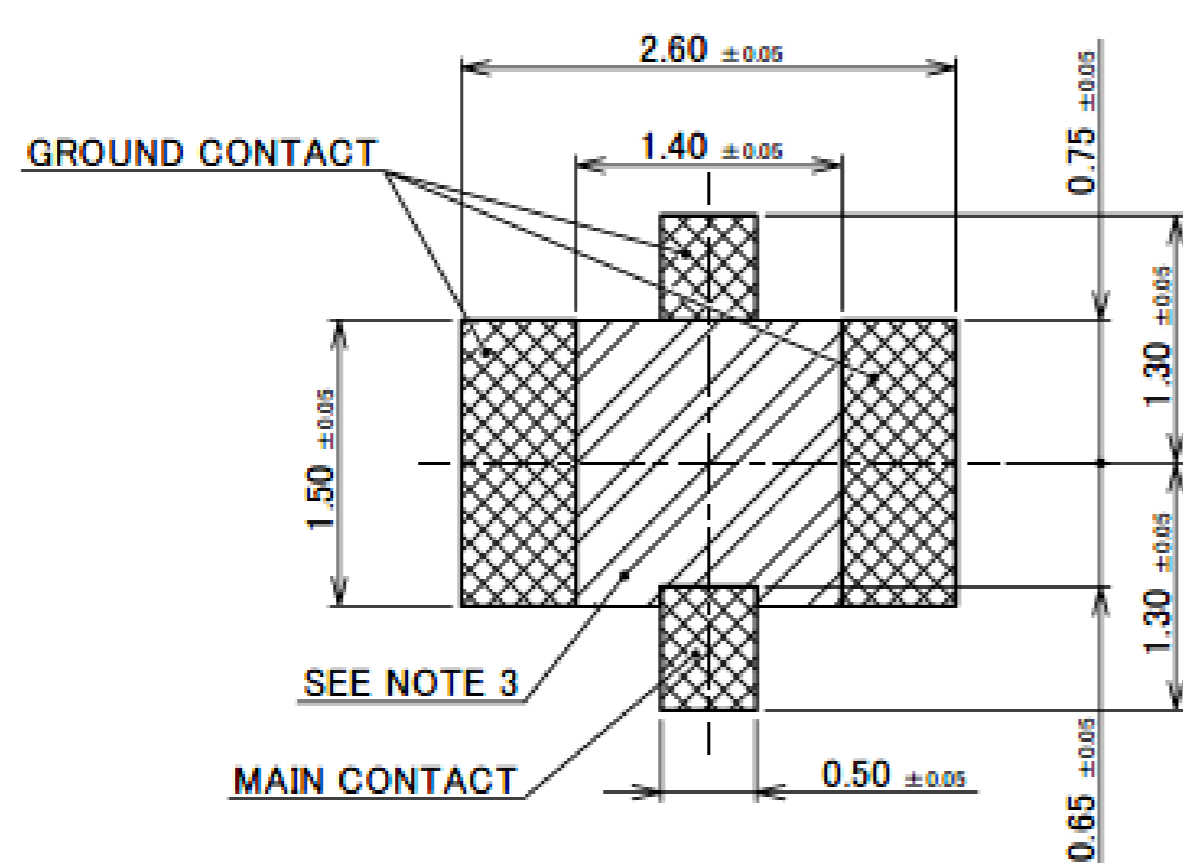
NO.	DESCRIPTION	MATERIAL	FINISH . REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.03 μm MIN. SOLDERING PART Au 0.03 μm MIN.
2	CONTACT A	BRASS	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.1 μm MIN. SOLDERING PART Au 0.1 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

Rev.13

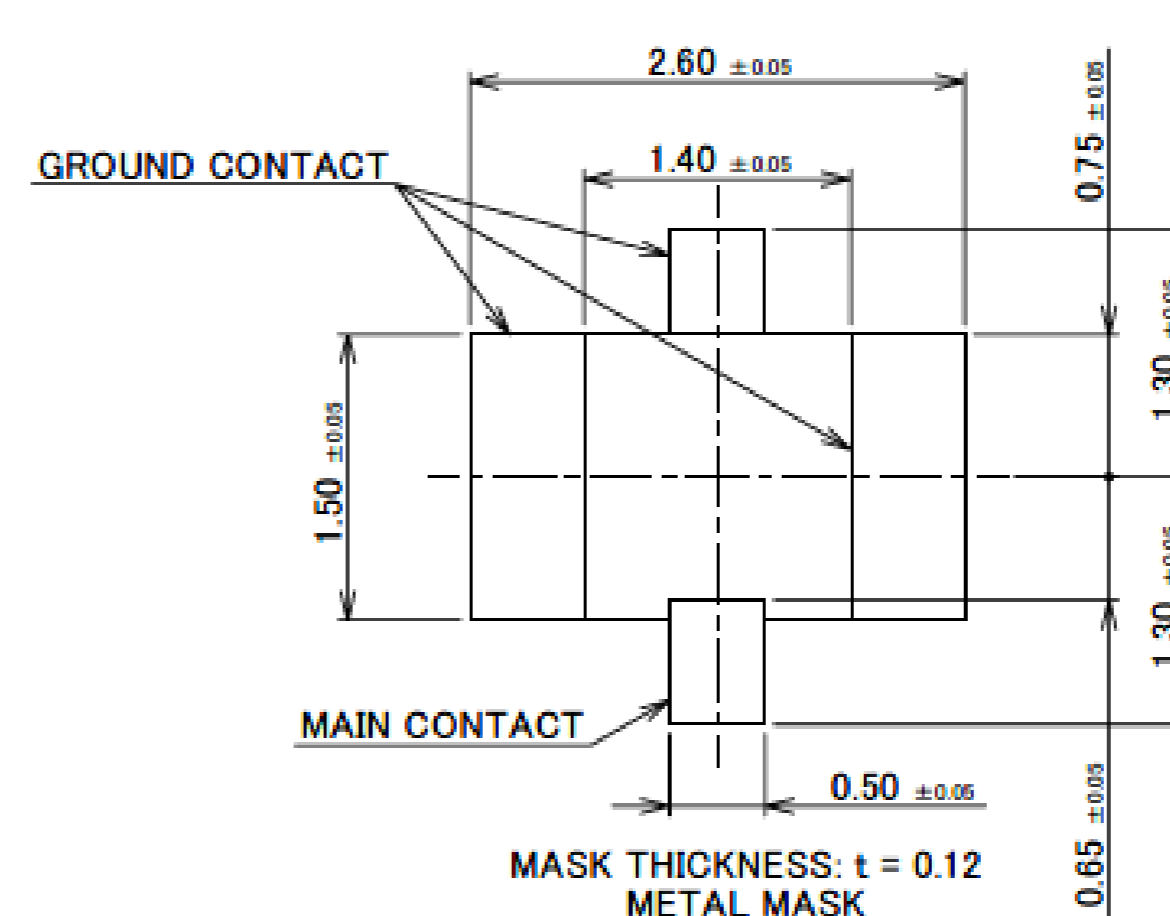
MHF[®] III Receptacle

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20609-002R
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC ~ 9 GHz
OPERATING TEMPERATURE	233 ~ 363 K(-40°C ~ +90°C)
VSWR (MATED WITH SMA ADAPTER PART No. 90285-002)	1.30 MAX. AT 0.1~ 3GHz, 1.40 MAX. AT 3~6GHz, 1.60 MAX. AT 6~9GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : Δ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : Δ R100 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC 200 V 1 MINUTE
DURABILITY	30 CYCLES
TOTAL UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 4 N MIN. / AFTER: 2 N MIN.
PRODUCT SPECIFICATION	PRS-2107
TEST REPORT	TR-15061
PACKING STANDARD	300-339
INSTRUCTION MANUAL	HIM-07002
APPEARANCE CRITERIA No.	QLS-A***

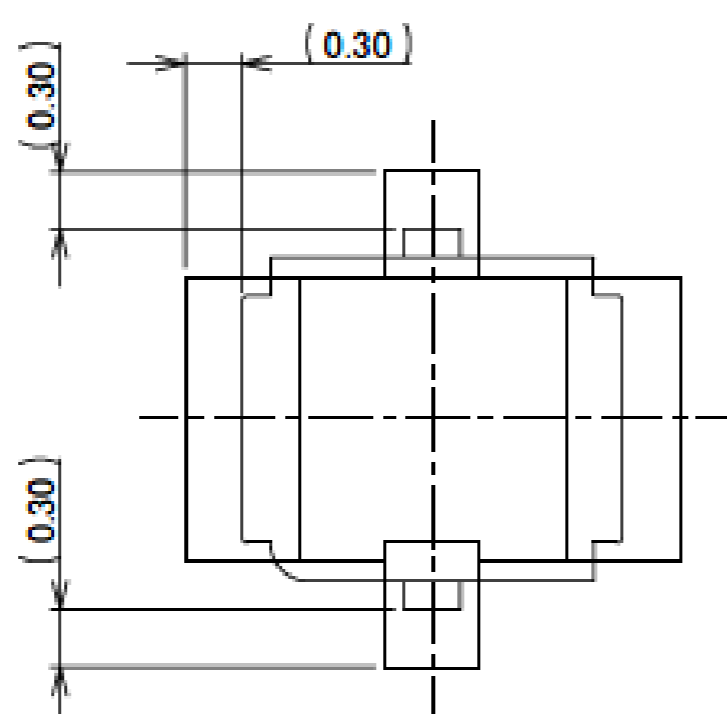
Rev.13



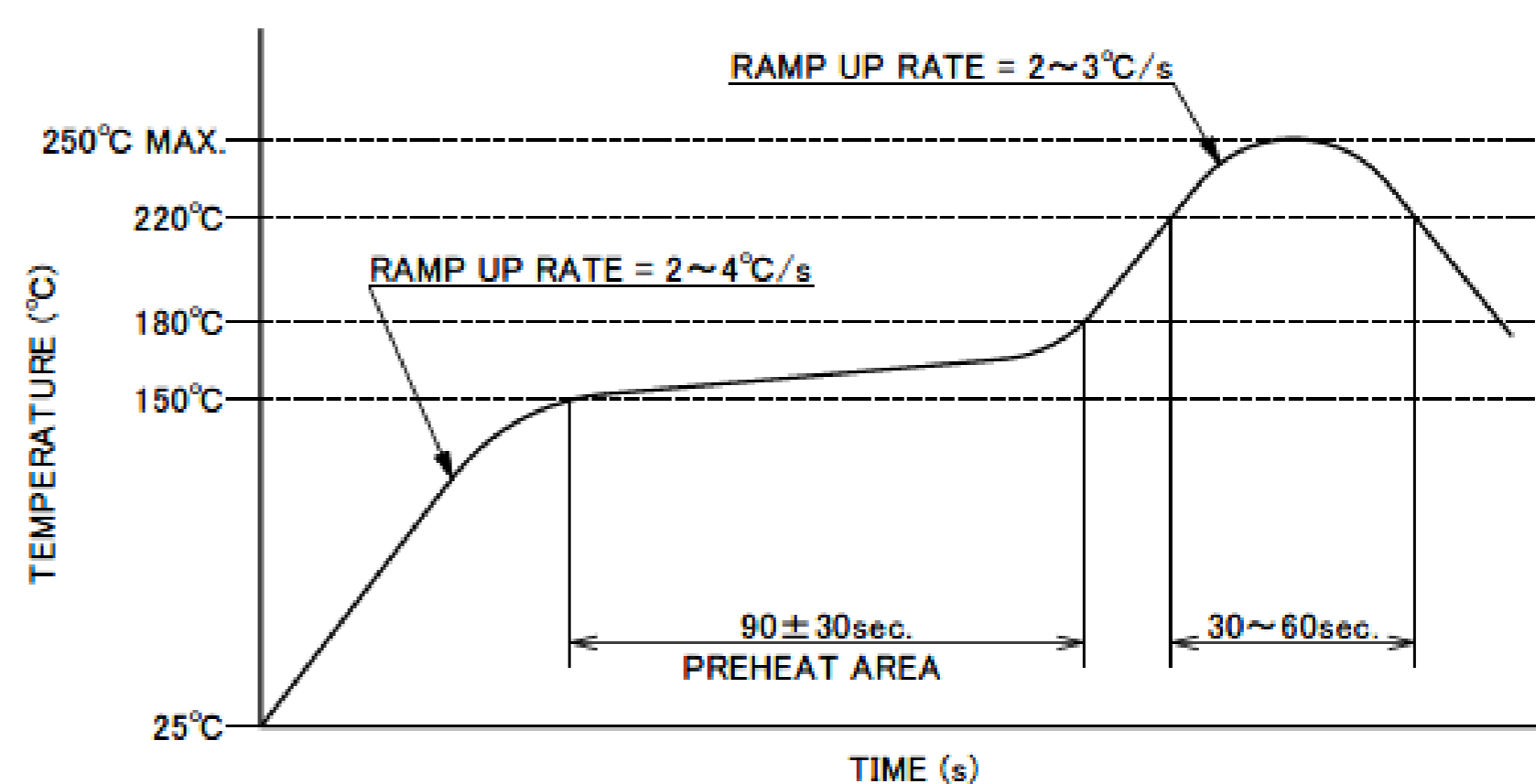
RECOMMENDED FOOTPRINT PATTERN



RECOMMENDED FOOTPRINT PATTERN



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

NOTES

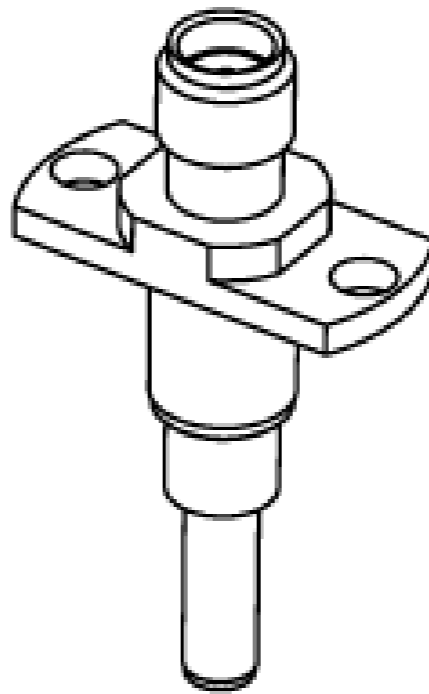
3. NO GROUND, SIGNAL, AND RESIST IN THIS AREA.

Rev.13

Accessories for MHF[®] III Receptacle



MHF III SMA ADAPTER
PART NO. 90285-002



MHF III RECEPTACLE HIGH CYCLE SMA ADAPTER
PART NO. 90491-001

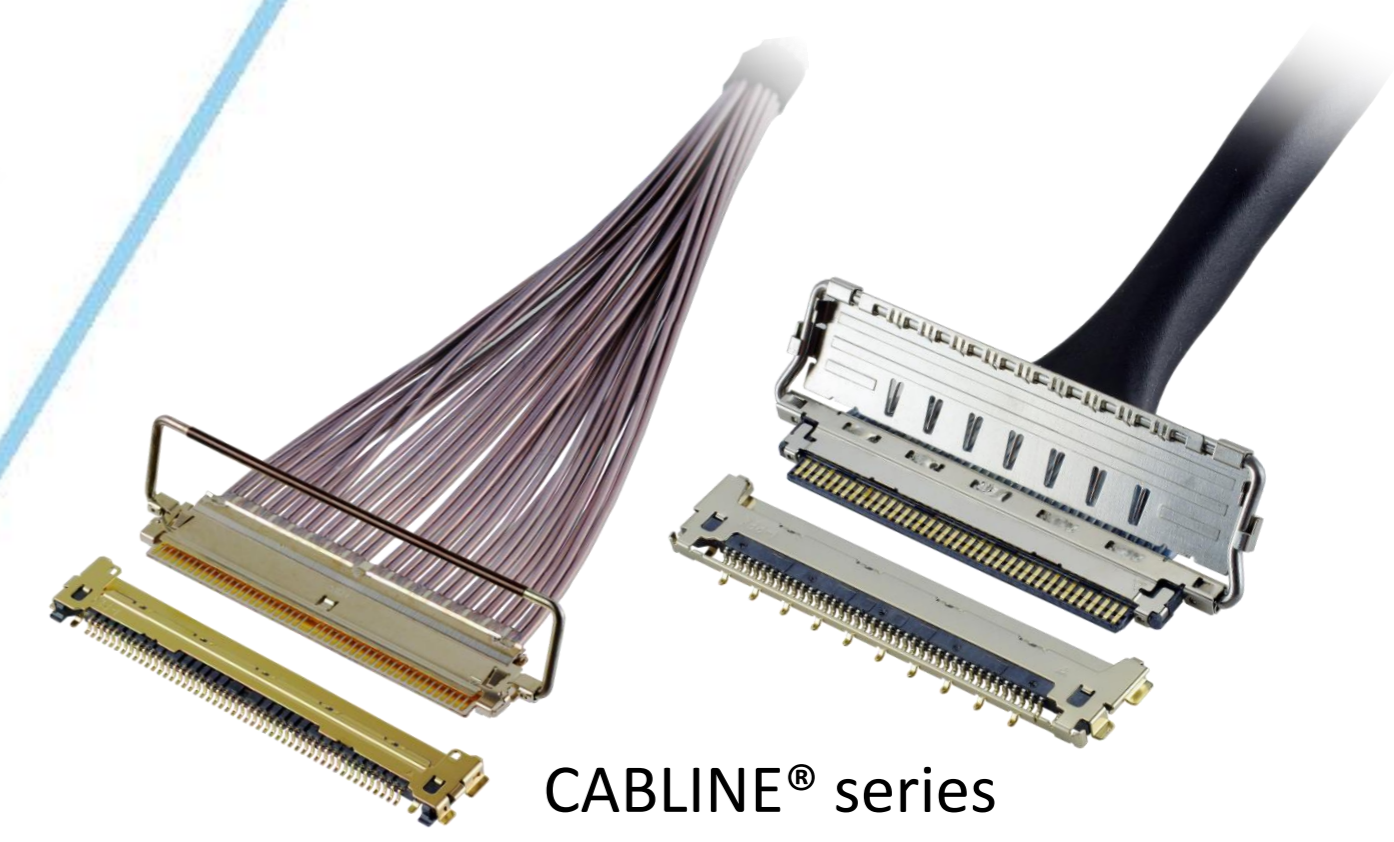
Custom Products Available

RF Connector

MHF® series



Micro-coaxial/Twinax/ Discrete Wire Connector



CABLINE® series

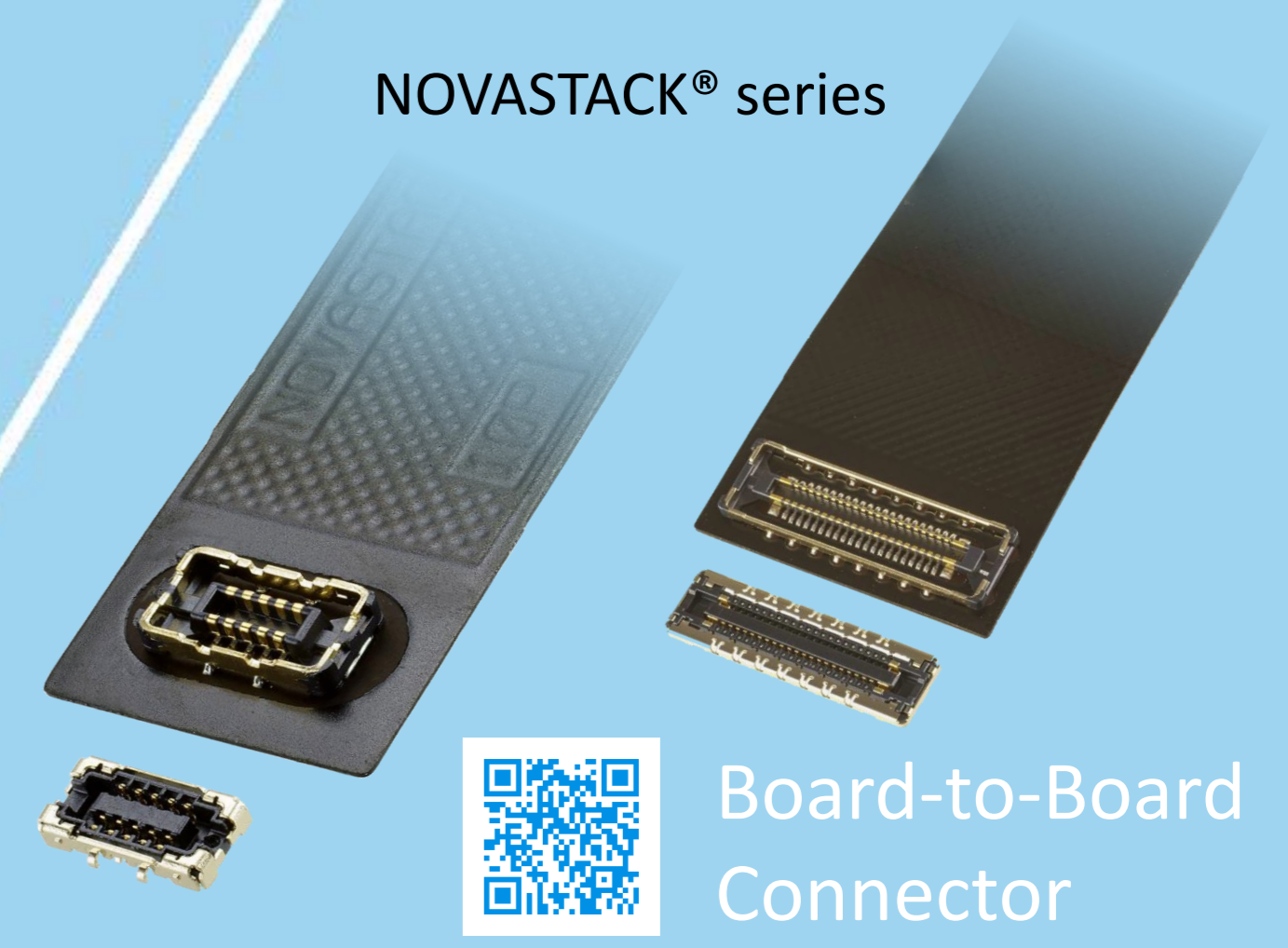


Optical Module

LIGHTPASS® series



NOVASTACK® series



Board-to-Board Connector



Power Connector/ Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



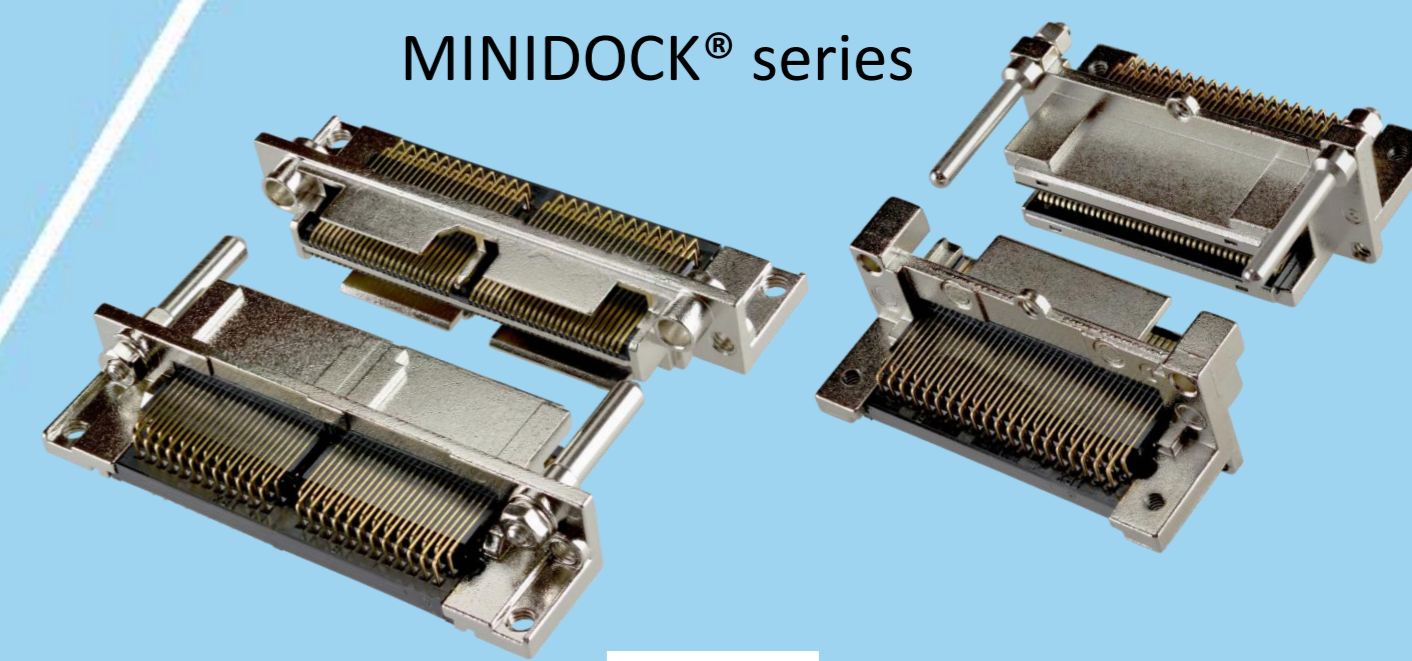
FPC FFC Connector



Inquiry



MINIDOCK® series



I/O Connector

I-PEX, MHF, CABLINE, LIGHTPASS, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCKS and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

www.i-pex.com



I-PEX

© I-PEX Inc. 2024
All rights reserved