

# MHF<sup>®</sup> TI

兼具微型化及強固型的連接器方案,適用於車載通訊天線

**Product Specifications:**

Mated Height (mm max.)	3.65	
Rece. SMT Size (mm)	9.4 x 5.2	
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	-

\*若有規格外 Pin 數需求,請與當地負責業務窗口聯繫。

**Applicable Cable Size:**

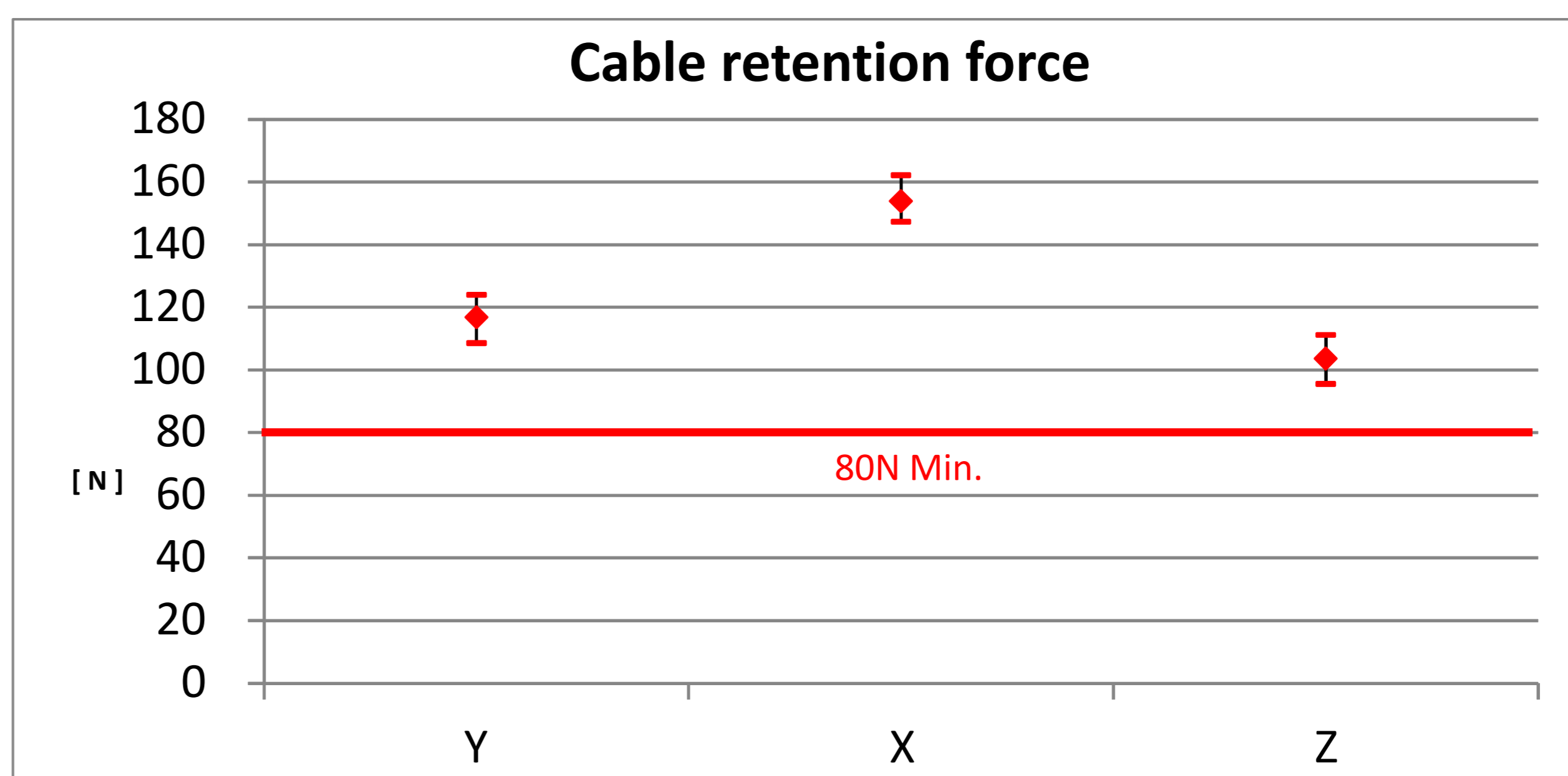
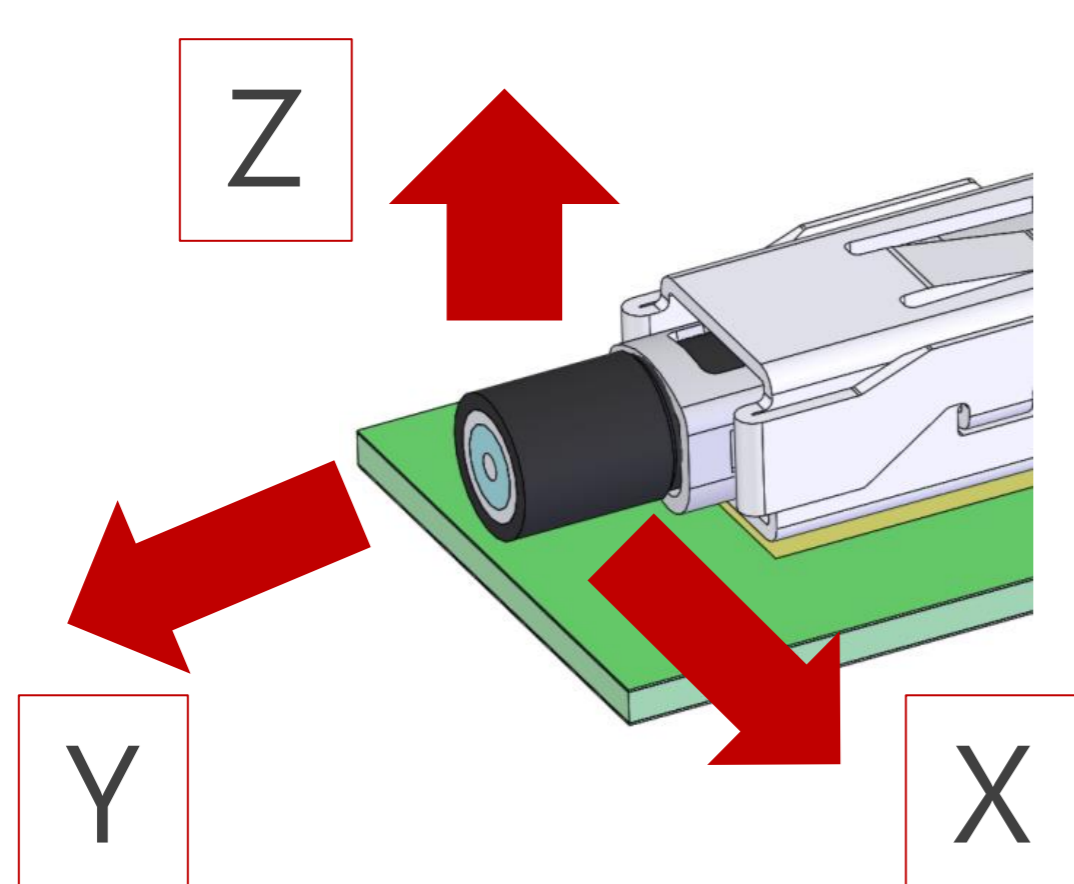
RG174 type
O.D. 2.4 mm / AWG 26
O.D. 3.0 mm / AWG 24

**Applicable Standards (Reference Only):**

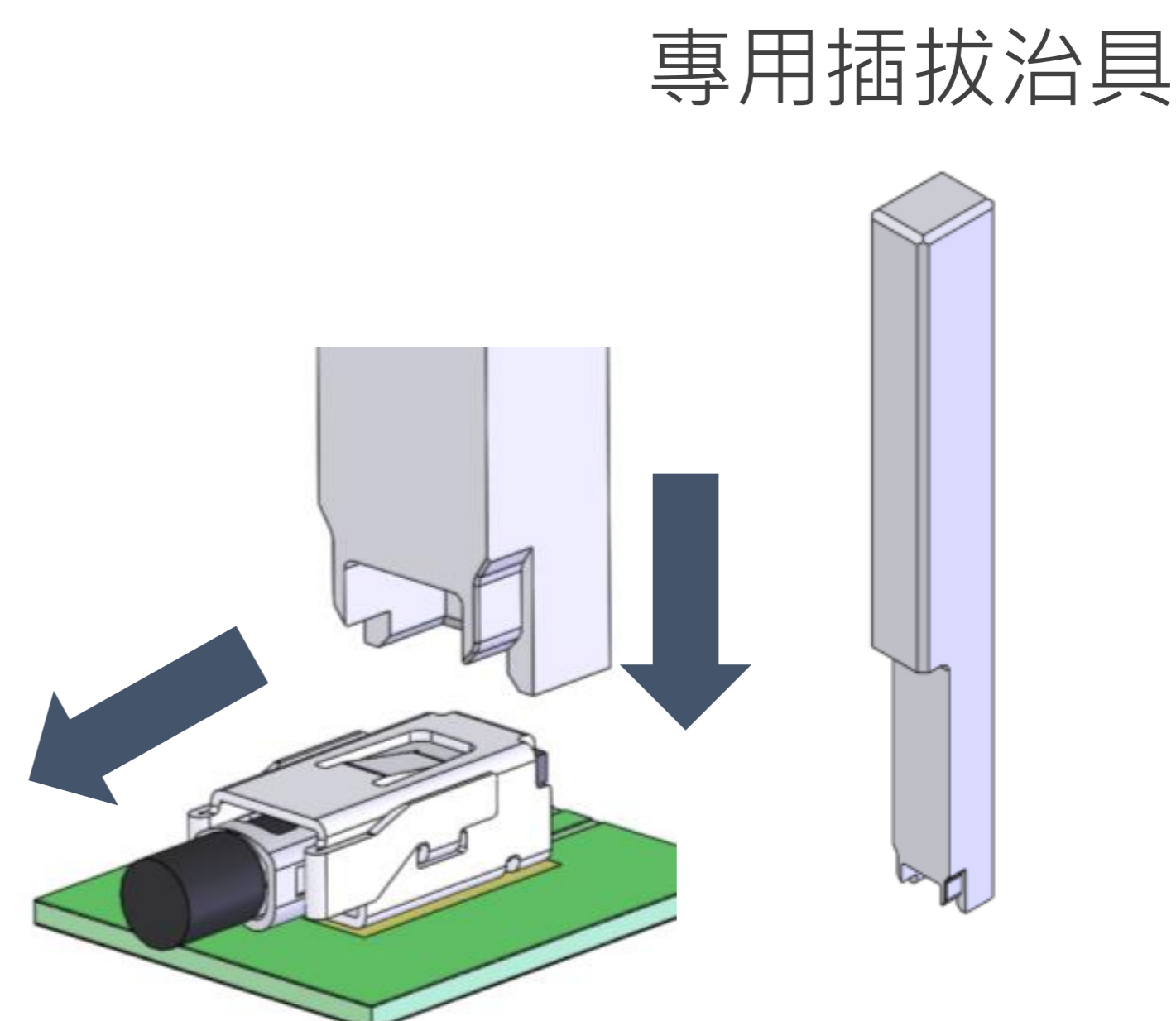
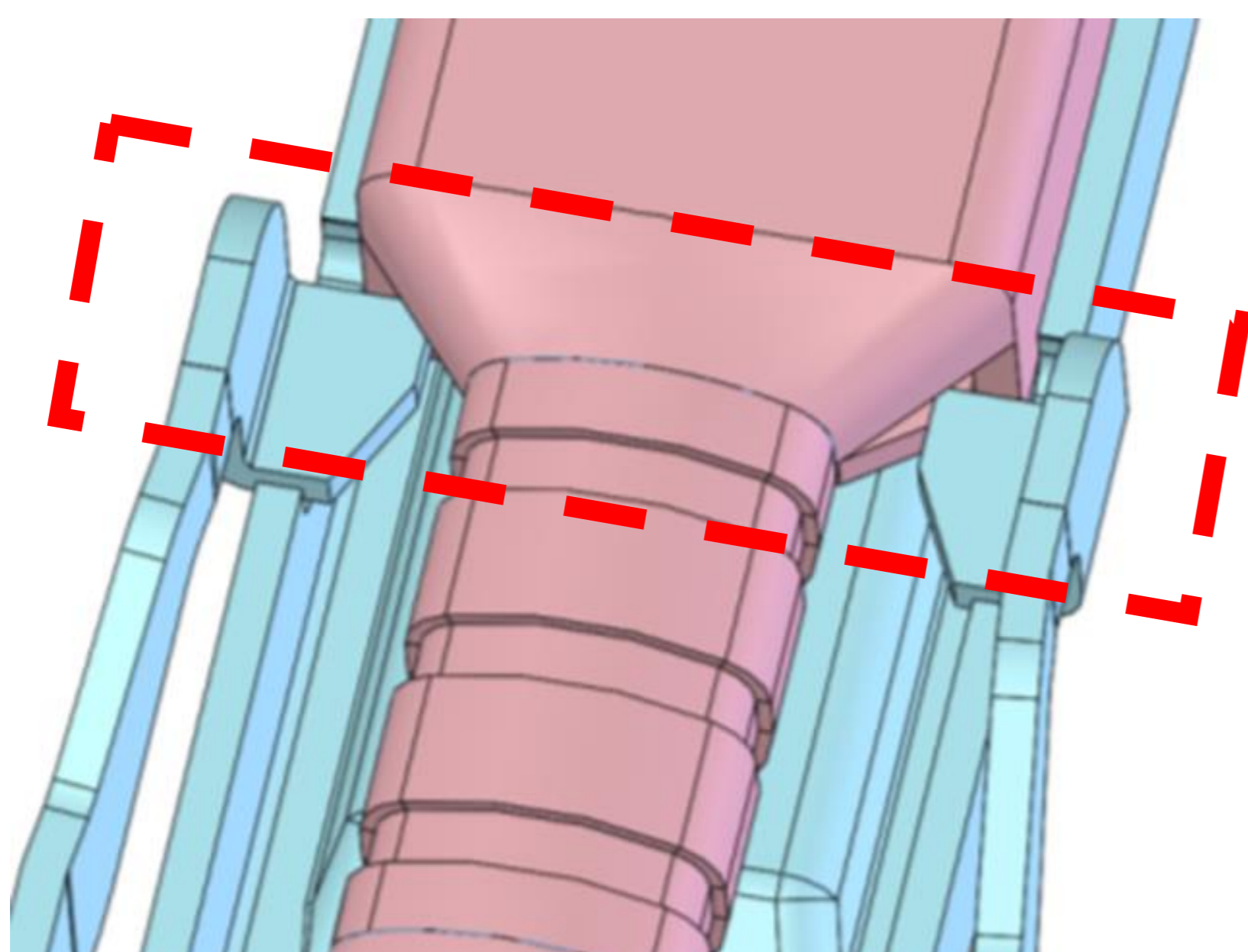
5G sub-6, Wi-Fi 6, LTE/LTE-Advanced, LPWA, Bluetooth, GPS, C-V2X, DSRC



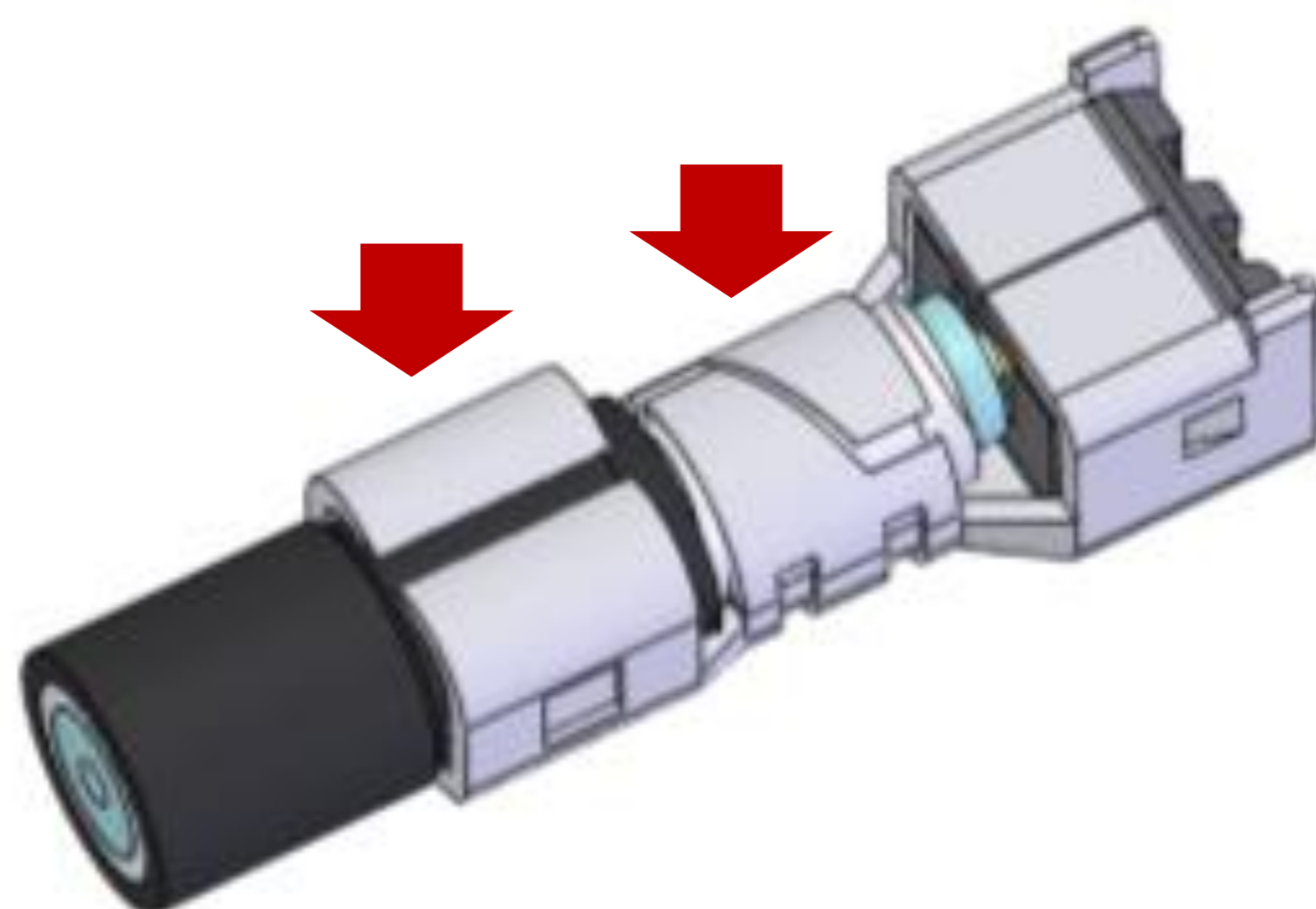
▶ 80N min. 具備同軸線高度保持力



▶ 機械式鎖扣確保訊號永久維持



▶ 適用線徑2.4-3.0 mm O.D.

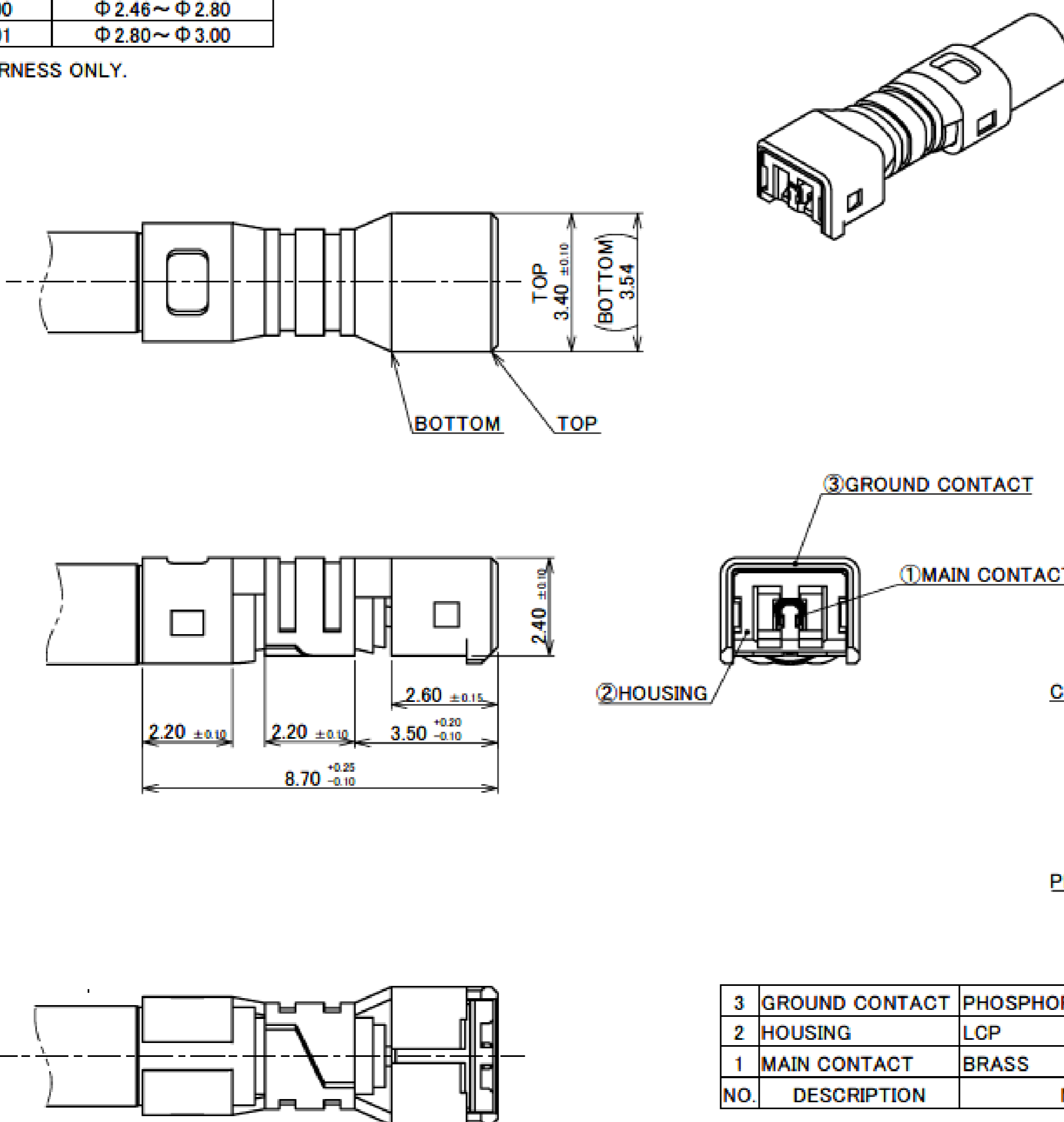
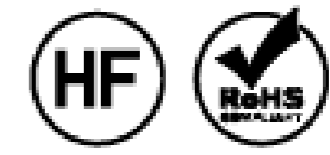


# Component Parts Details

## MHF®-TI Plug

Recommended P/N		20859-001R-0*
PART NO.	APPLICABLE CABLE	
20859-001R-00	Φ 2.46 ~ Φ 2.80	
20859-001R-01	Φ 2.80 ~ Φ 3.00	

OFFERED AS HARNESS ONLY.



- NOTES.
1. APPLICABLE CONNECTOR  
MHF-TI RECEPTACLE(P/N: 20860-001E-01)
  2. APPLICABLE CABLE  
AWG#24~26, Φ 2.46 ~ 3.0mm  
Φ 2.46~ Φ 2.80 20589-001R-00  
Φ 2.80~ Φ 3.00 20589-001R-01
  3. APPLICABLE FREQUENCY RANGE: DC TO 6 GHz
  4. RoHS COMPLIANT  
THIS PRODUCT IS COMPLIANT WITH RoHS DIRECTIVE.
  5. HALOGEN FREE  
THIS PRODUCT IS CONFORMED TO IEC 61249-2-21.

NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	Sn PLATING
2	HOUSING	LCP	UL94V-0, BLACK
1	MAIN CONTACT	BRASS	Au PLATING

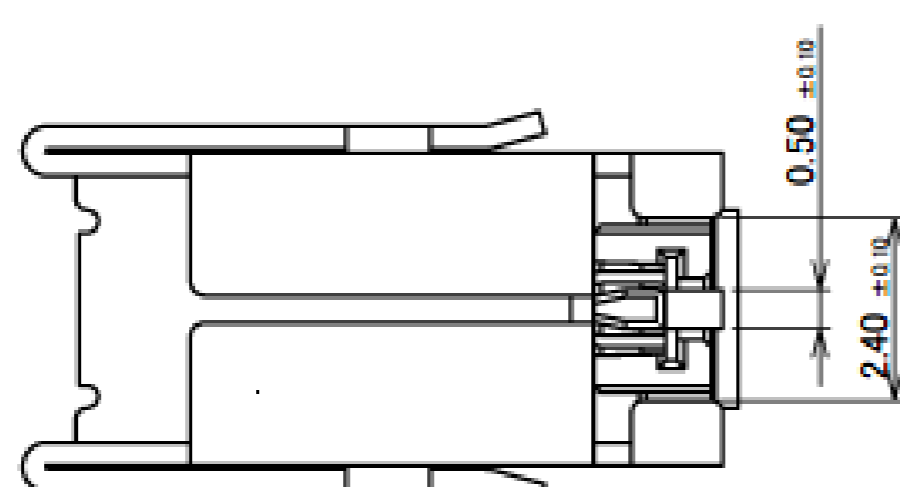
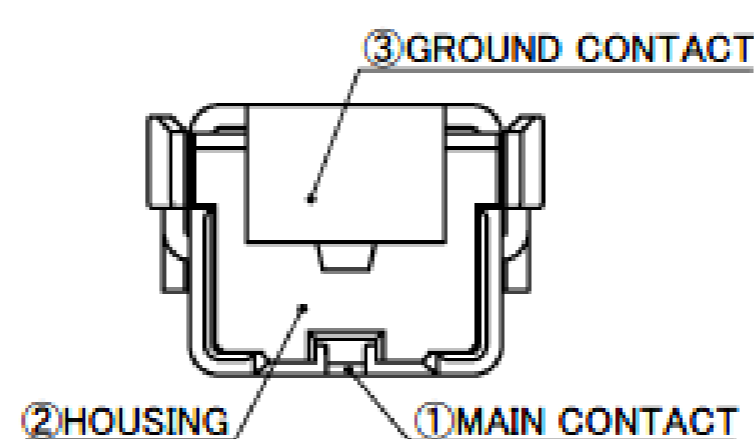
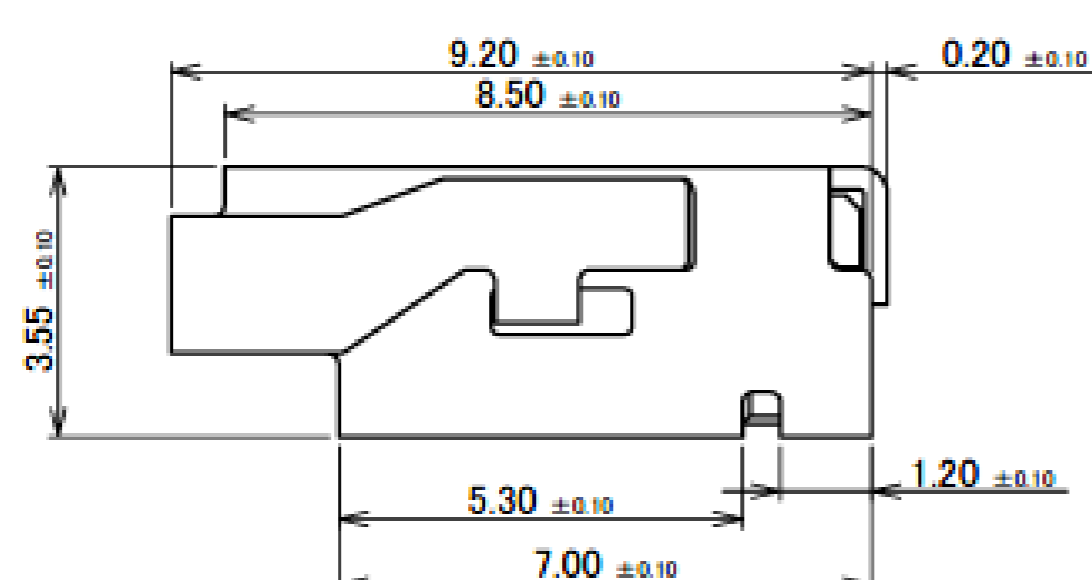
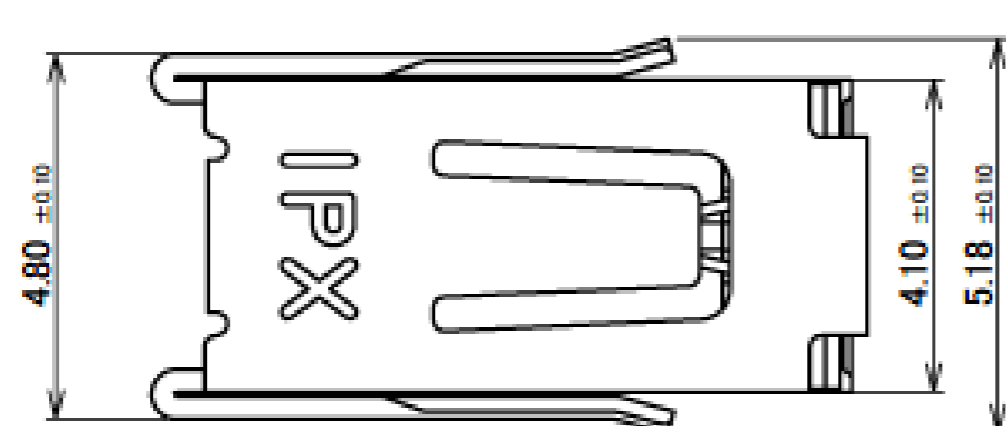
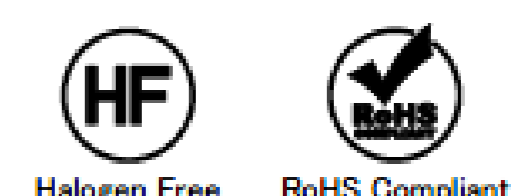
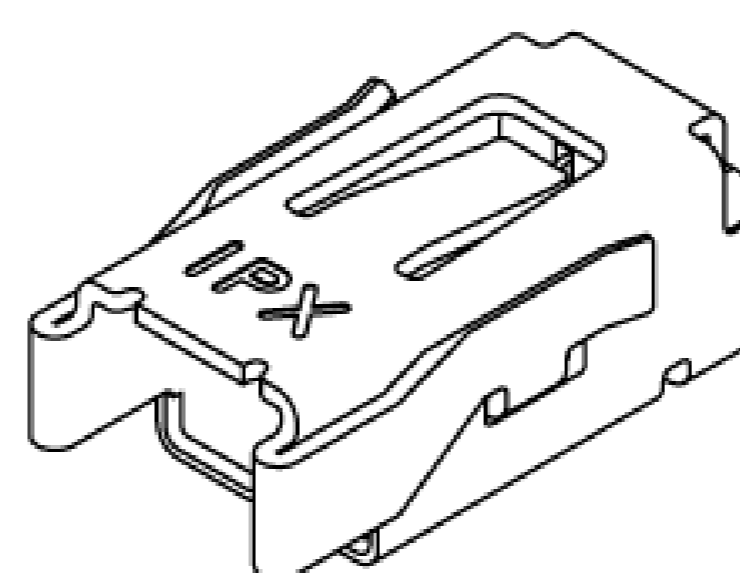
# MHF®-TI Plug

ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20860-001E-0*
RATING AMPERAGE	100mA AC/DC
RATING FREQUENCY	DC~6 GHz
OPERATING TEMPERATURE	233~378K (-40°C~+105°C)
OPERATING HUMIDITY	85% MAX. (NON-CONDENSING)
VSWR	1.5 MAX. AT DC~6 GHz
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: 30 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 15 mohm MAX. / AFTER TEST: 25 mohm MAX.
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE
DURABILITY	30 CYCLES
MATING FORCE	45N MAX.
MATING LOCK STRENGTH	110 N MIN
CRIMP STRENGTH	90 N MIN.
PRODUCT SPECIFICATION	PRS-2573
TEST REPORT	TR-20007
INSTRUCTION MANUAL	HIM-20001
APPEARANCE CRITERIA No.	QLS-A***

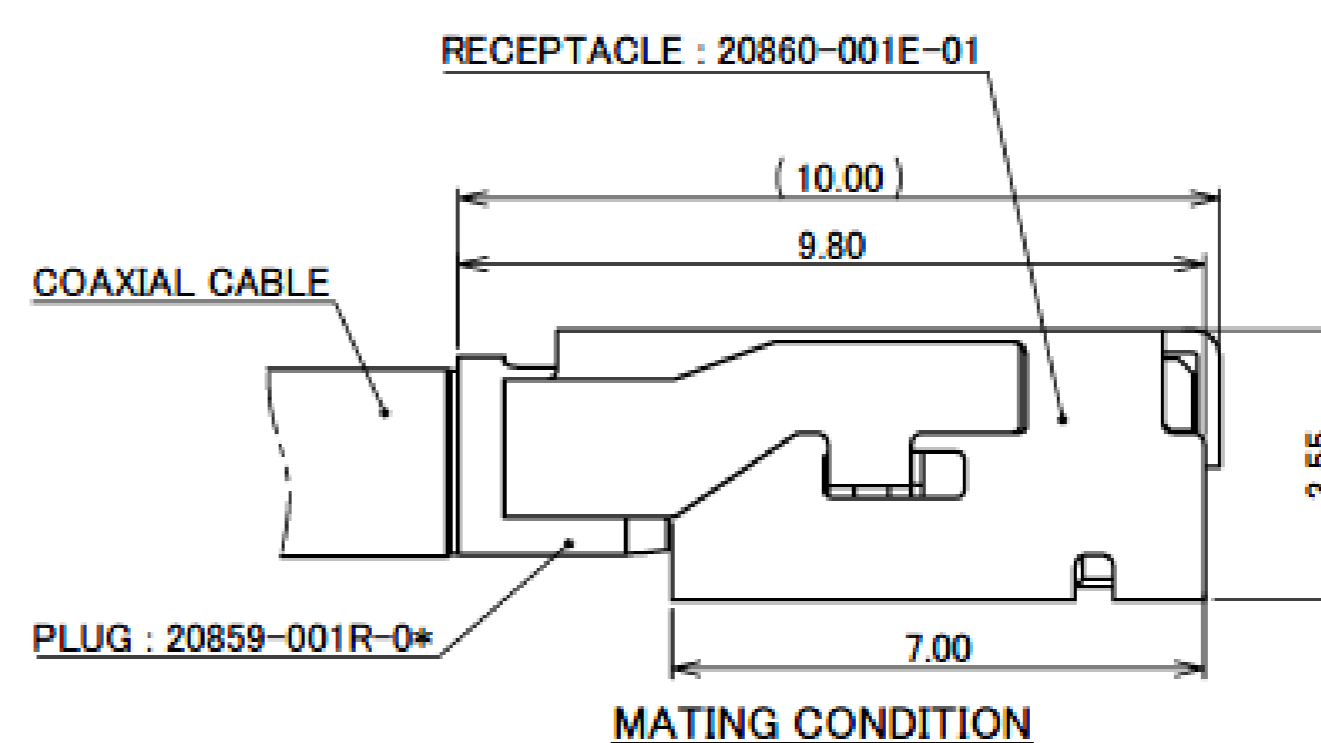
Rev.3

# MHF®-TI Receptacle

Recommended P/N	20860-001E-01
PART NO.	20860-001E-01



- NOTES.
1. APPLICABLE CONNECTOR  
MHF-TI PLUG(P/N: 20859-001R-0\*)
  2. APPLICABLE FREQUENCY RANGE: DC TO 6 GHz
  3. COPLANARITY : 0.1MAX.
  4. RoHS COMPLIANT  
THIS PRODUCT IS COMPLIANT WITH RoHS DIRECTIVE.
  5. HALOGEN FREE  
THIS PRODUCT IS CONFORMED TO IEC 61249-2-21.

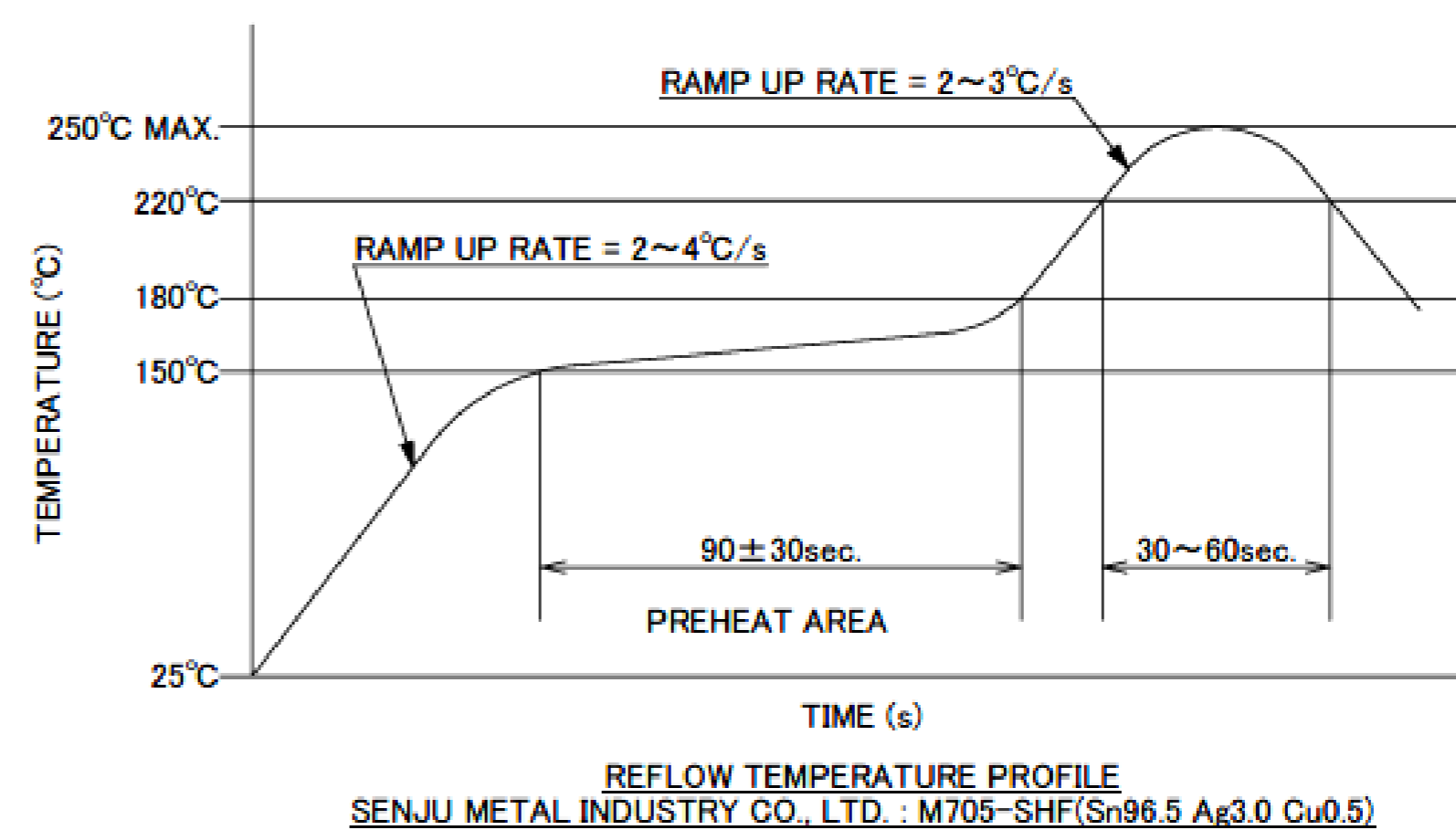
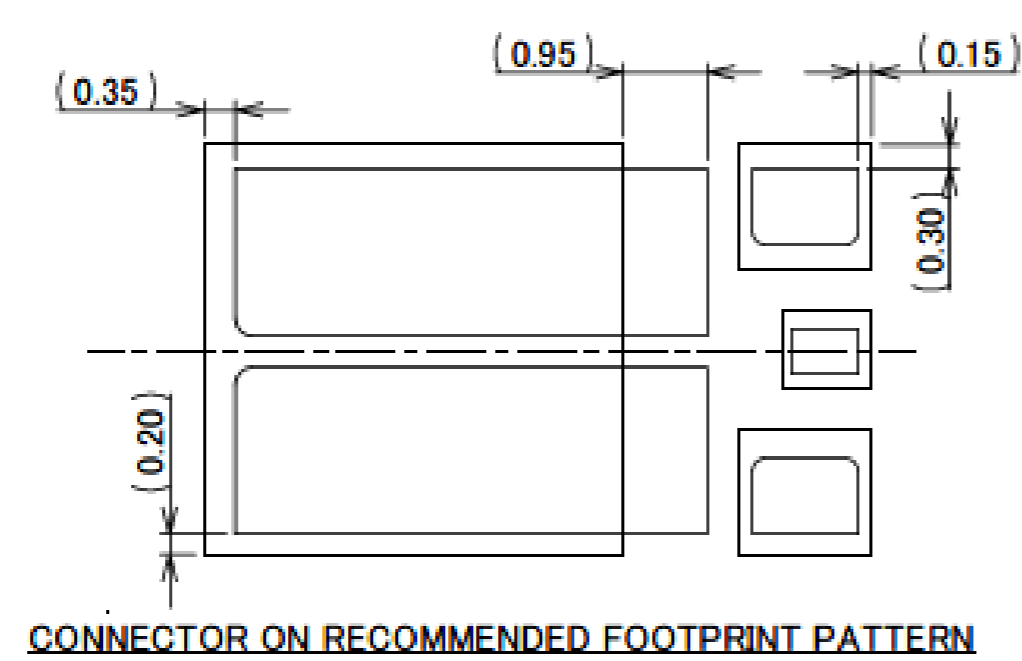
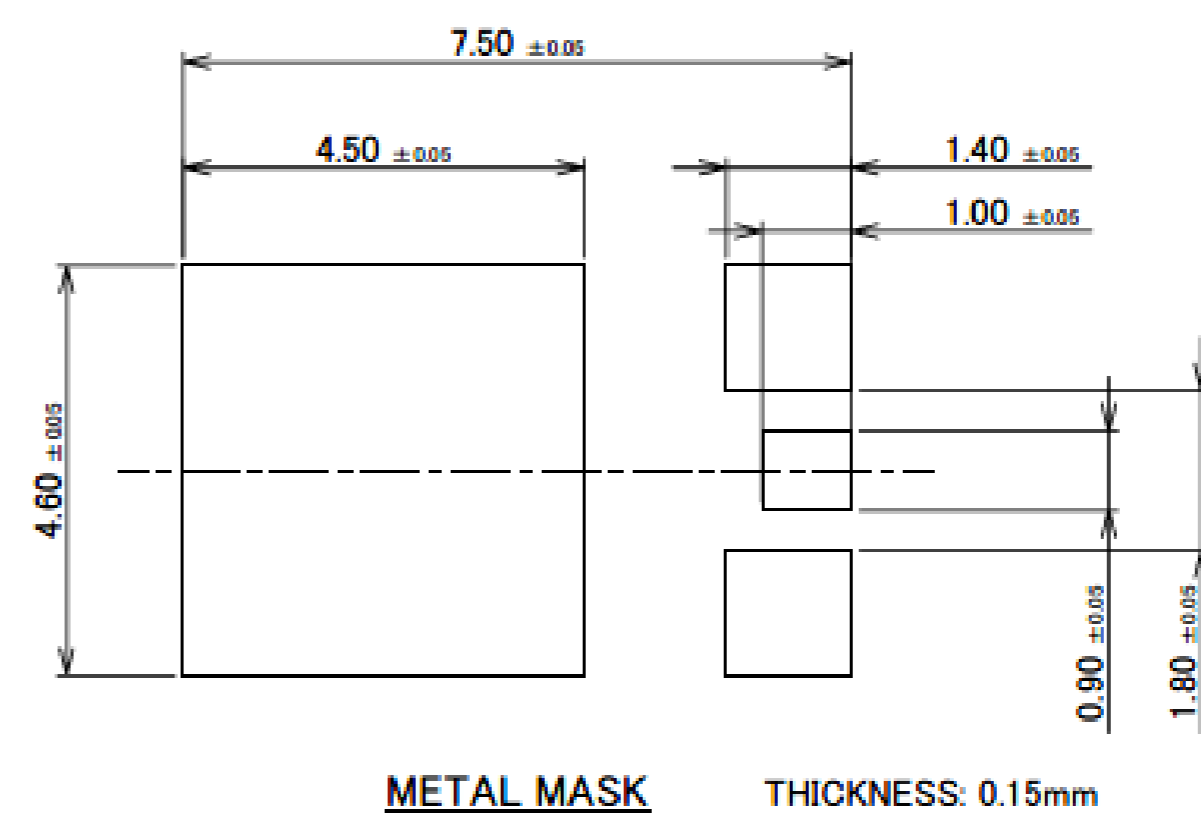
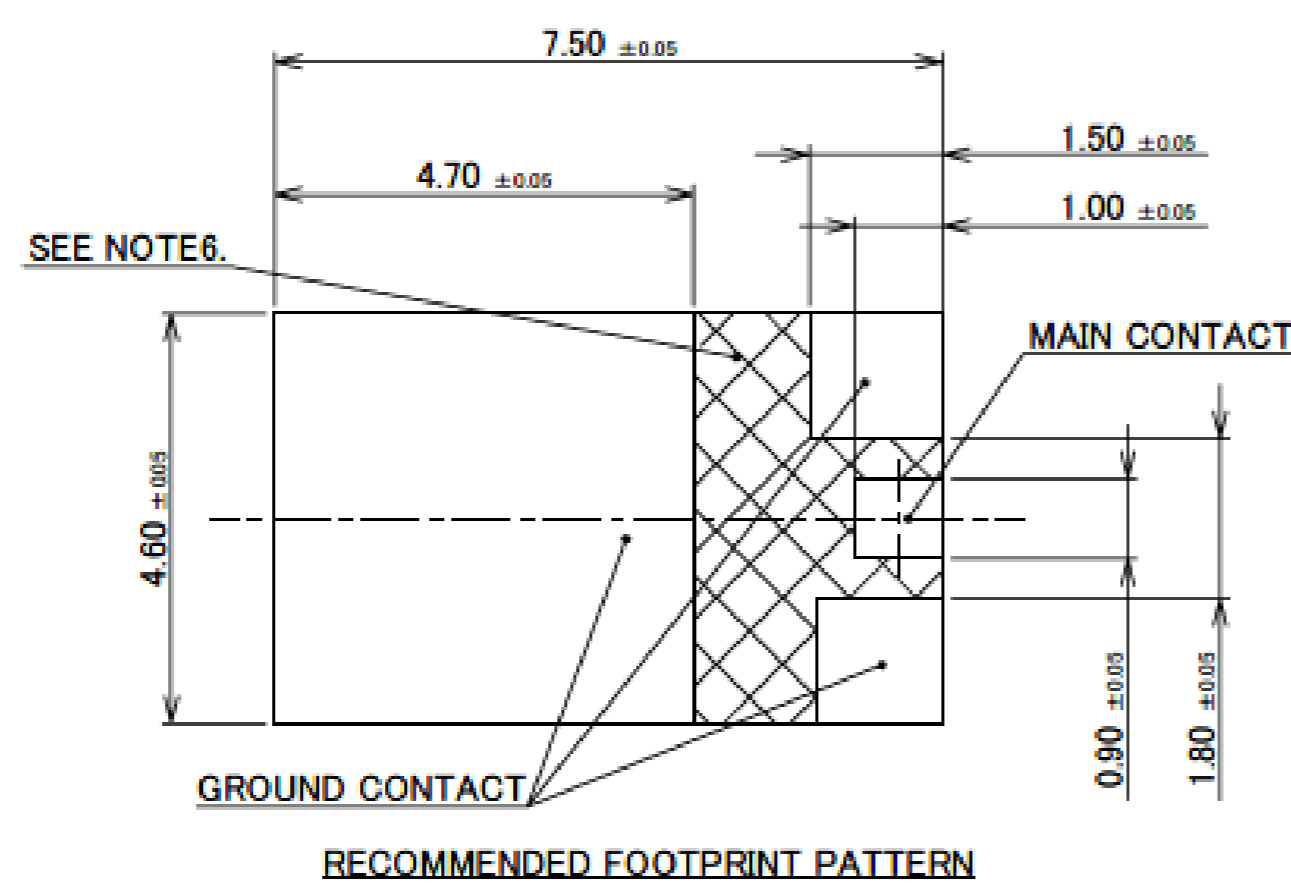


Rev.5

# MHF®-TI Receptacle

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20859-001R-01
RATING AMPERAGE	100mA AC/DC
RATING FREQUENCY	DC~6 GHz
OPERATING TEMPERATURE	233~378K (-40°C~+105°C)
OPERATING HUMIDITY	85% MAX. (NON-CONDENSING)
VSWR	1.5 MAX. AT DC~6 GHz
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: 30 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 15 mohm MAX. / AFTER TEST: 25 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE
DURABILITY	30 CYCLES
MATING FORCE	45N MAX.,
MATING LOCK STRENGTH	110 N MIN
CRIMP STRENGTH	90 N MIN.
PRODUCT SPECIFICATION	PRS-2573
TEST REPORT	TR-20007
PACKING STANDARD	PST-18032
INSTRUCTION MANUAL	HIM-20001
APPEARANCE CRITERIA No.	QLS-A***

Rev.5



NOTES  
6. CUT OUT PROHIBITION AREA

Rev.5

Board to Board



High-Density



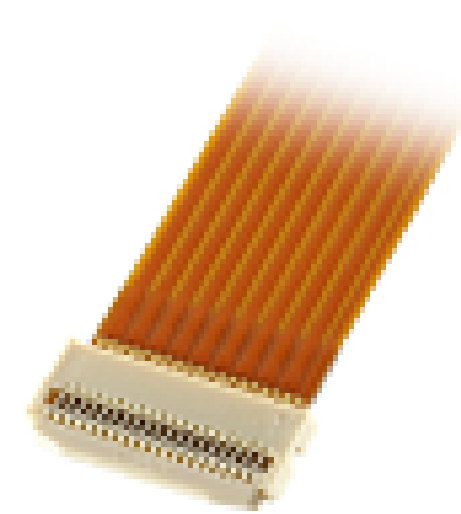
Autolocking FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial / Discrete Cable



High-Speed



RF



High-Frequency



Optical Module



High-Speed



Effector



Power



High-Power



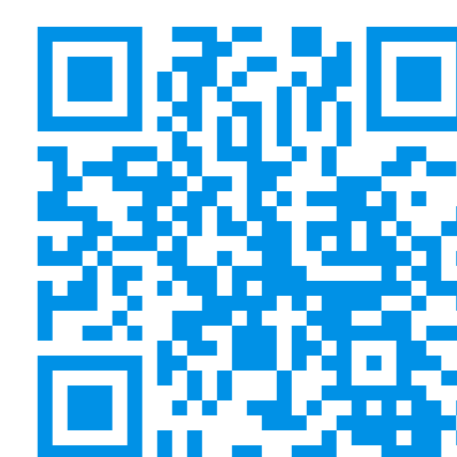
I/O (Input/Output)



Quick charge



Inquiry



Custom Connectors Available



I-PEX, MHF, CABLINE, NOVASTACK, EVAFLEX, MINIFLEX, ISH, IARPB, IASLP, ESTORQ, ISFIT, i-Fit 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](http://www.i-pex.com)



I-PEX

© I-PEX Inc. 2022  
All rights reserved.