

MHF[®] TI

Small, robust SMT connector for automotive telematics antenna

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	-

* Please inquire for pin counts not listed or outside of the pin count range.

Applicable Cable Size:

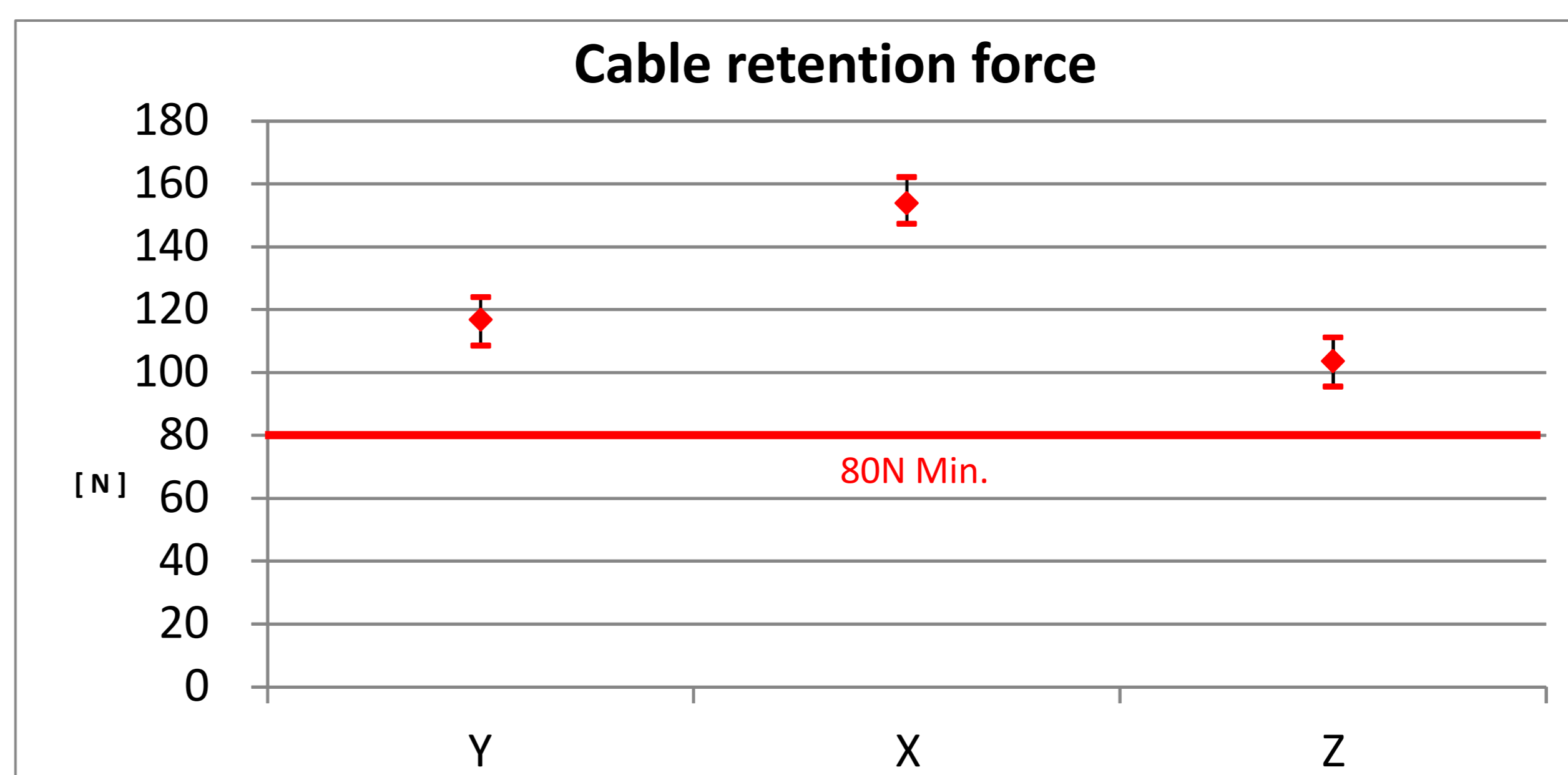
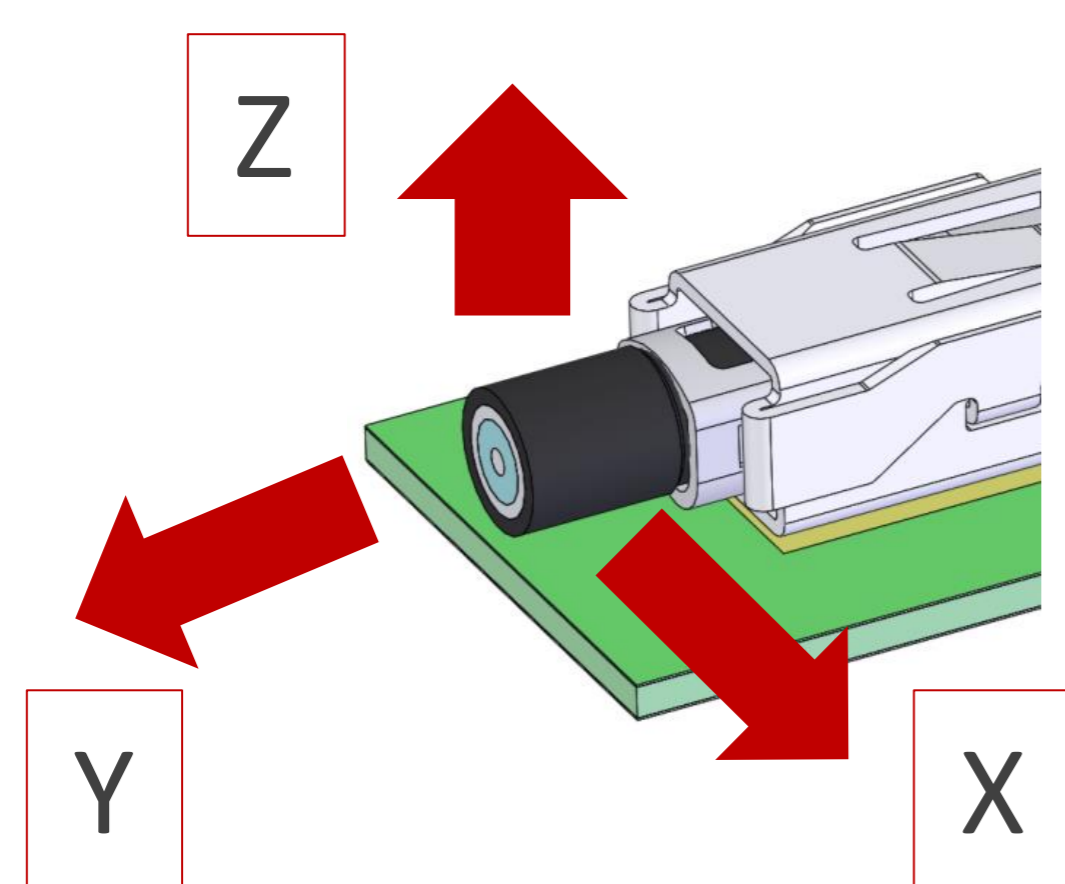
RG174 type
O.D. 2.4 mm / AWG 26
O.D. 3.0 mm / AWG 24

Applicable Standards (Reference Only):

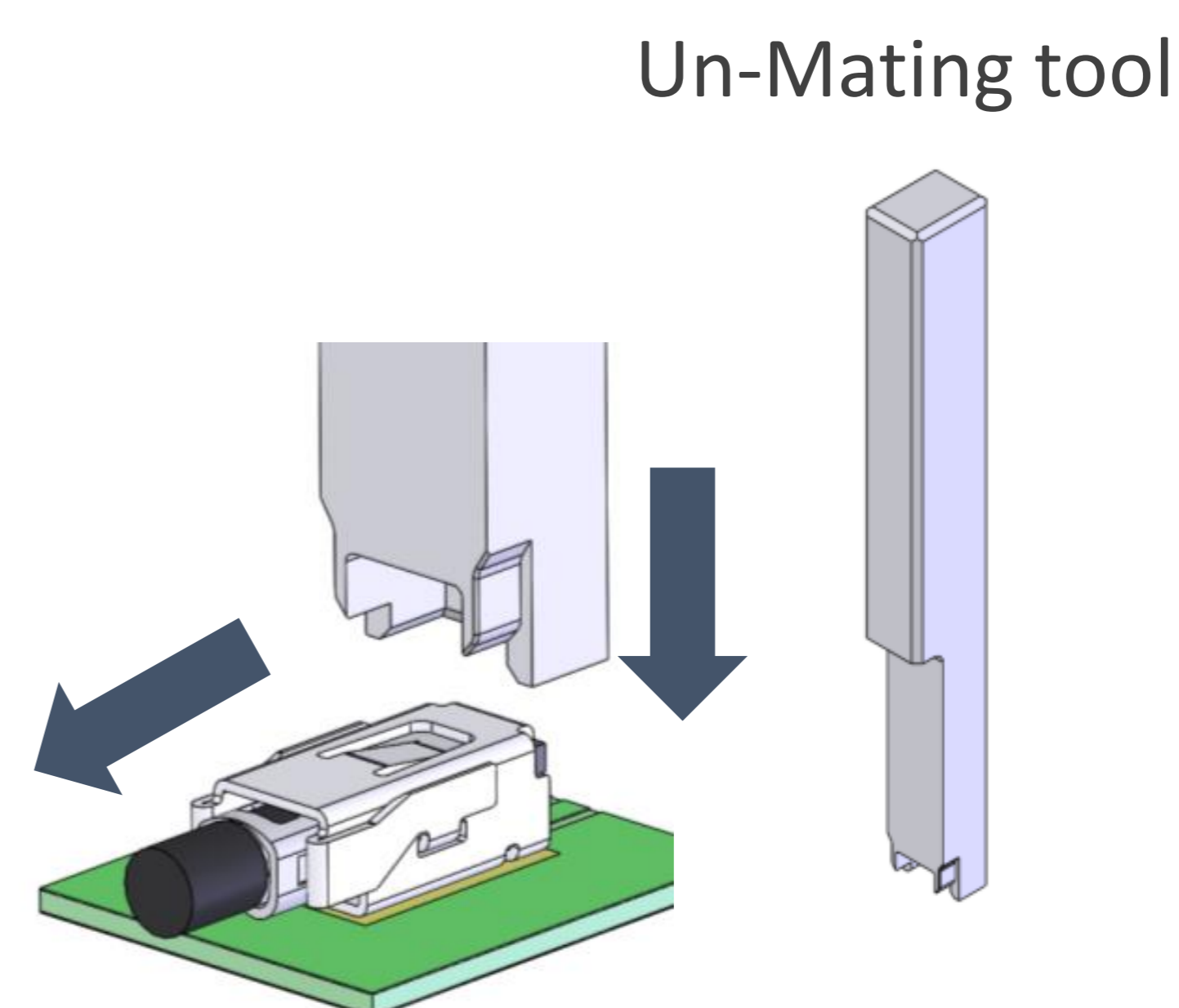
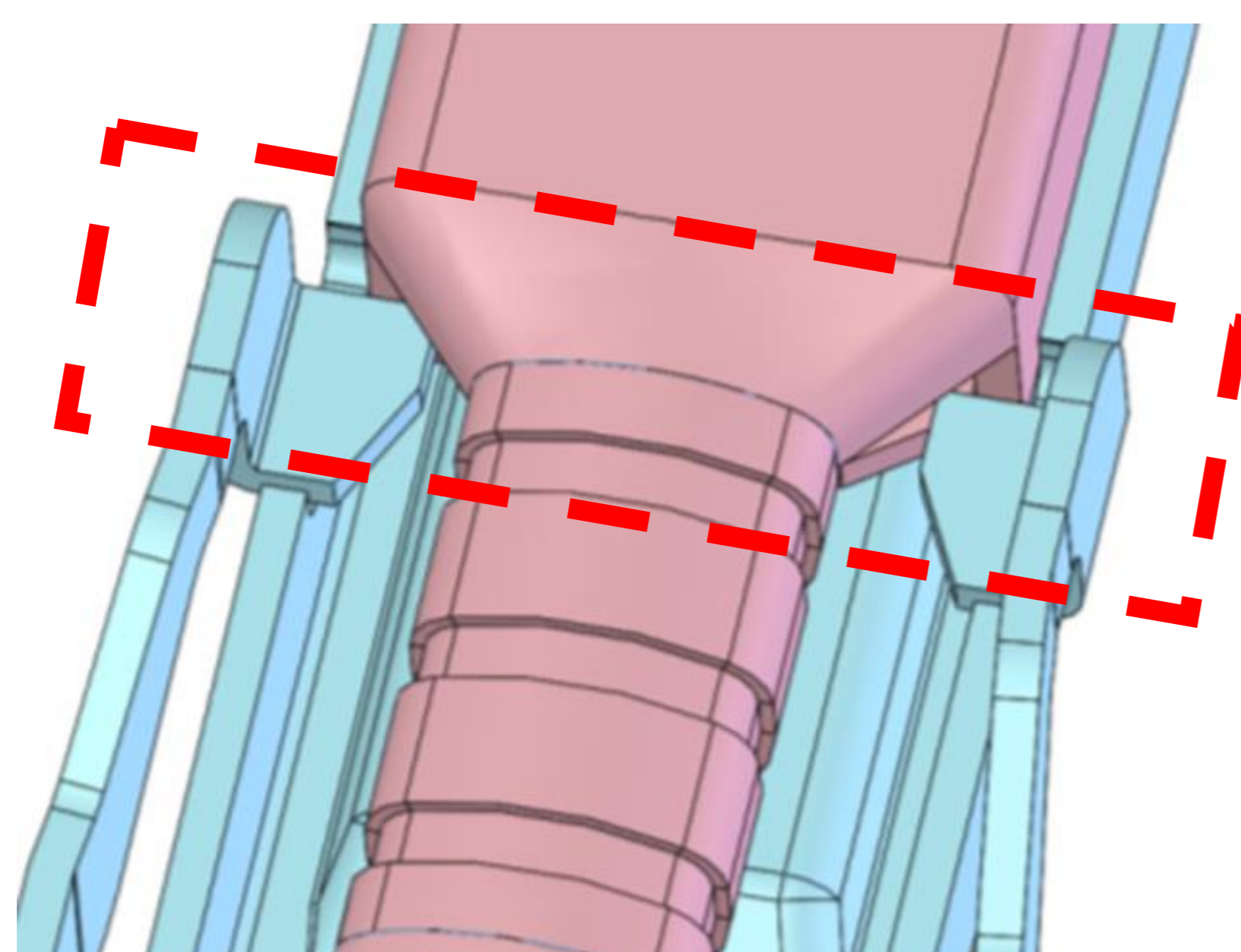
5G sub-6, Wi-Fi 6, LTE/LTE-Advanced, LPWA, Bluetooth, GPS, C-V2X, DSRC



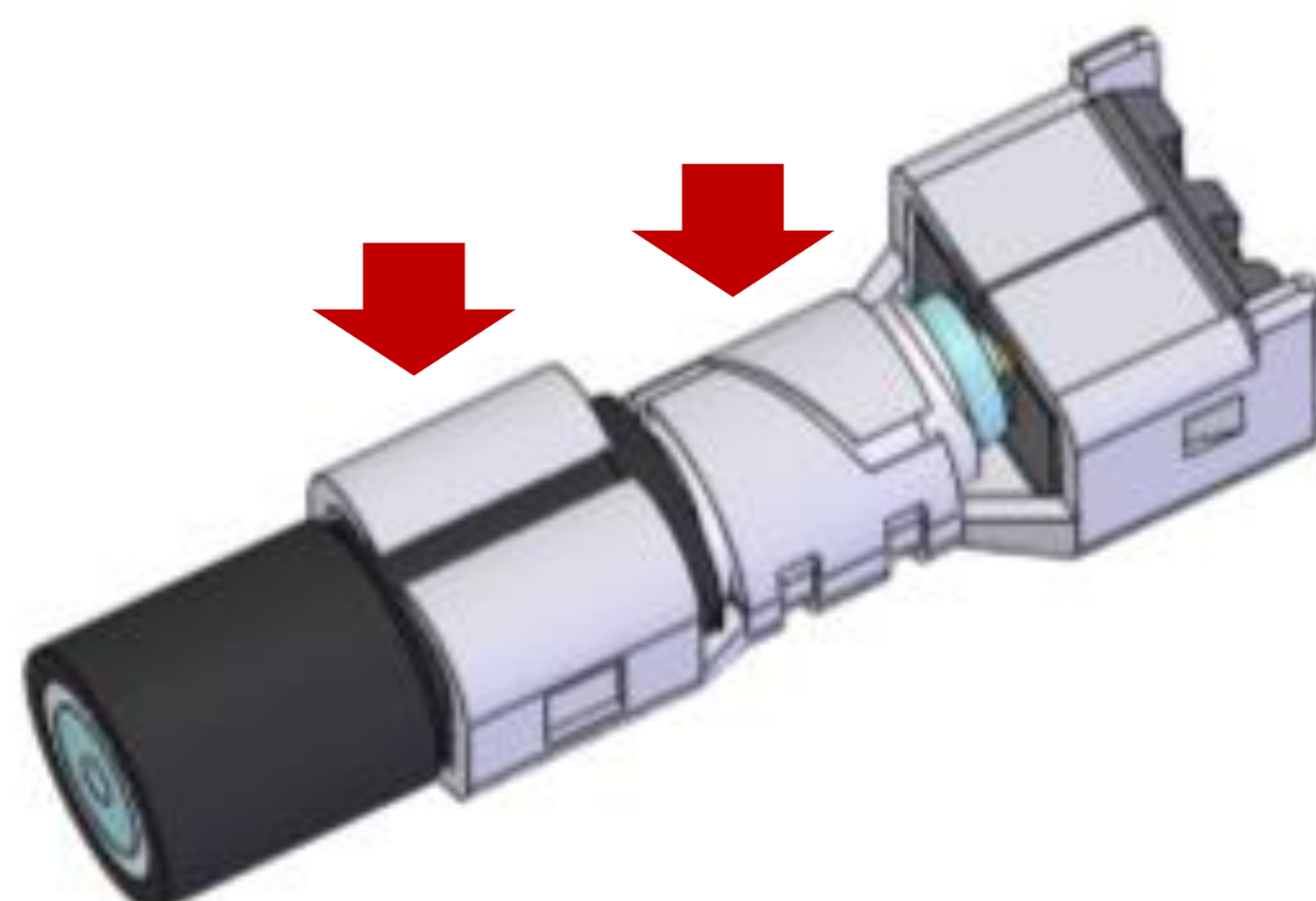
▶ **High retention force (80N minimum)**



▶ **Permanent mechanical lock with tactile indication of secure contact**



▶ **2.4-3.0 mm O.D. wire available with robust crimping structure**

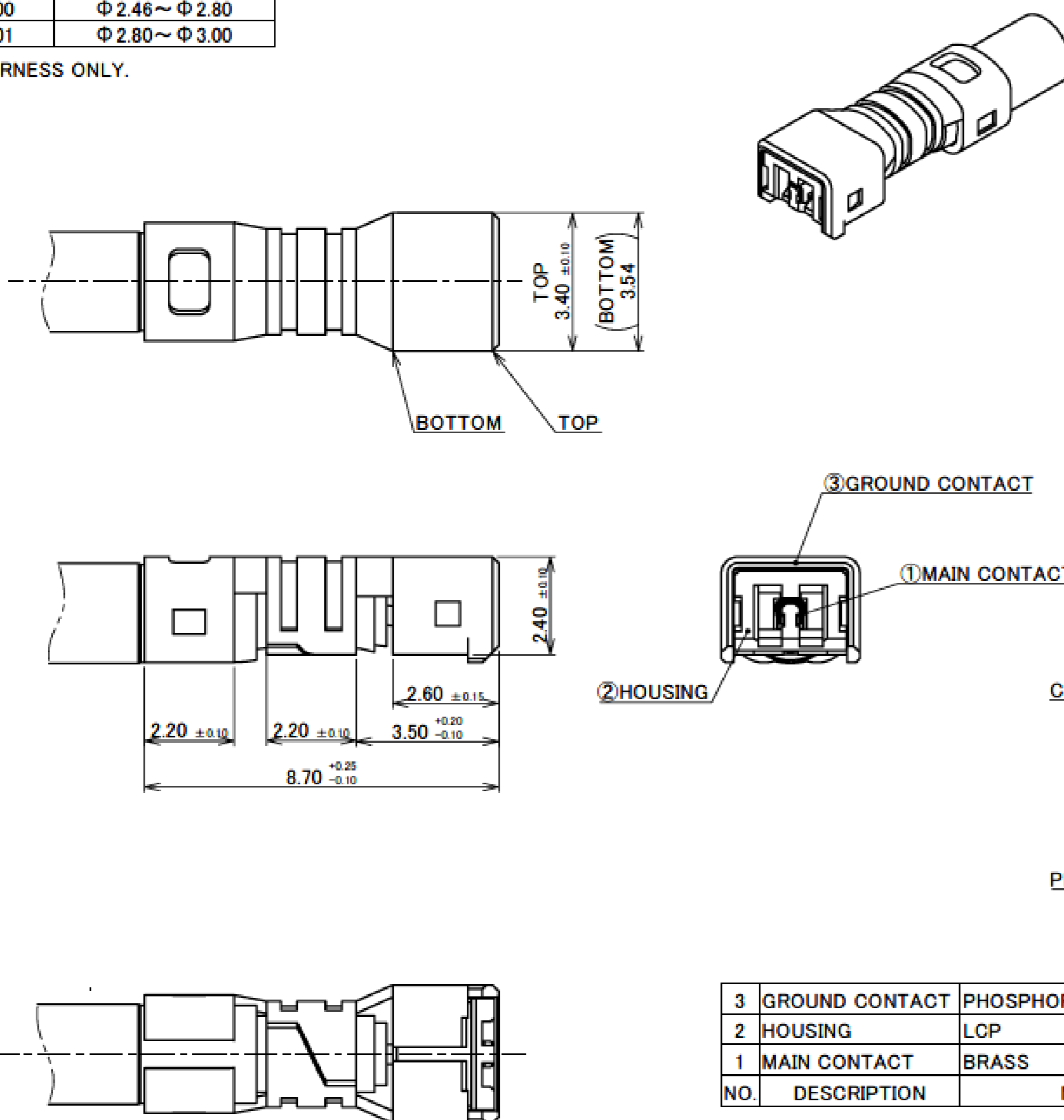
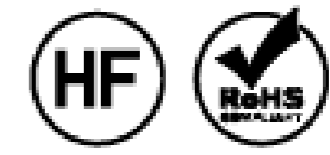


Component Parts Details

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

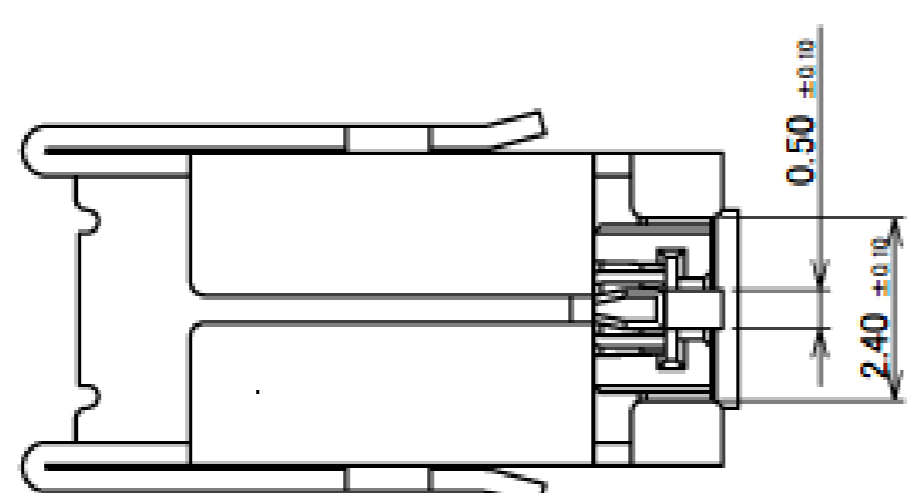
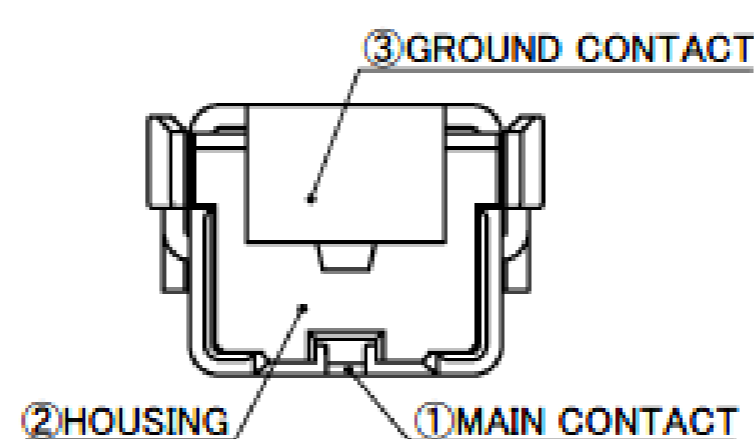
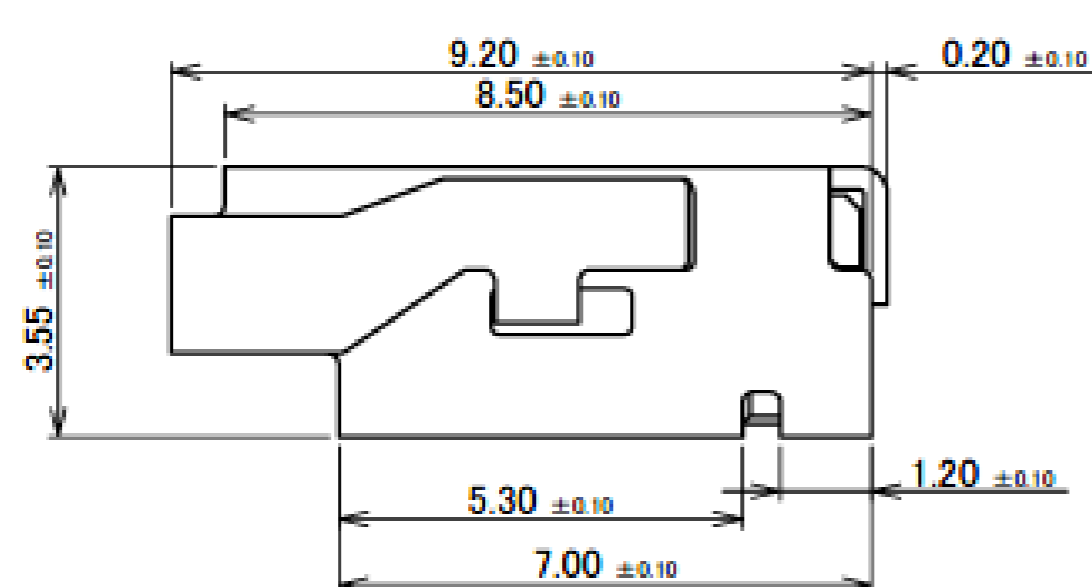
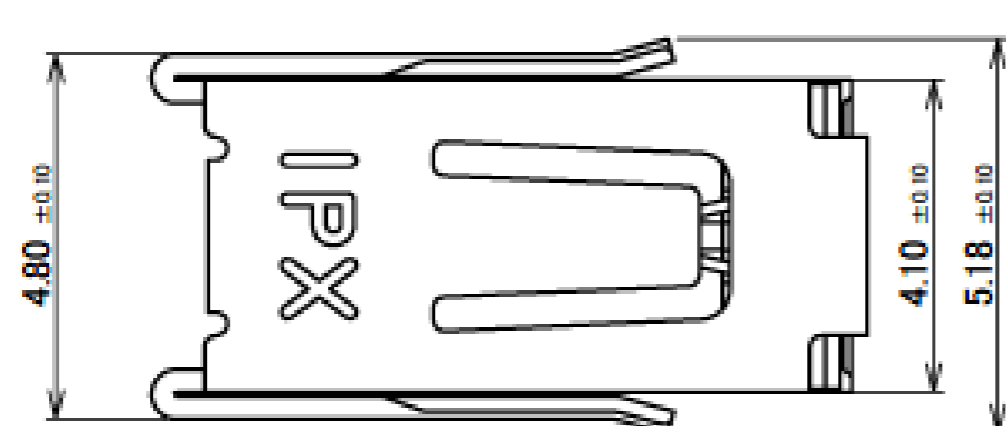
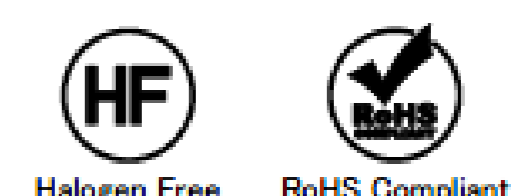
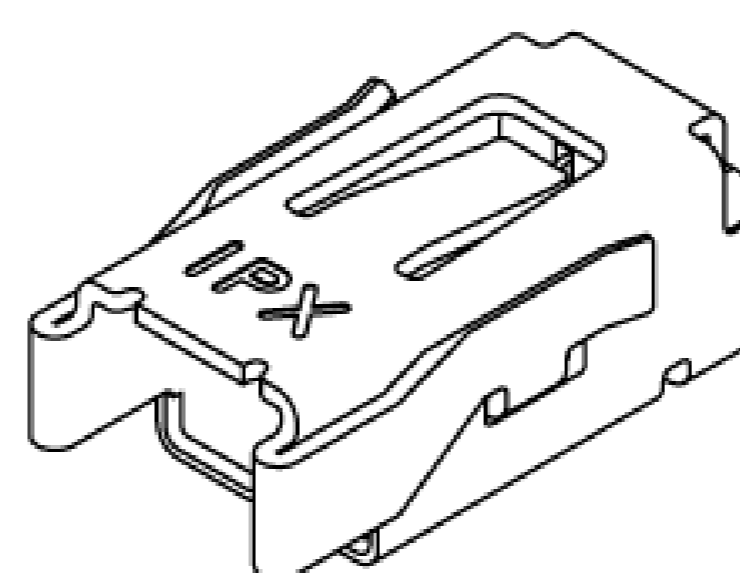
MHF®-TI Plug

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***

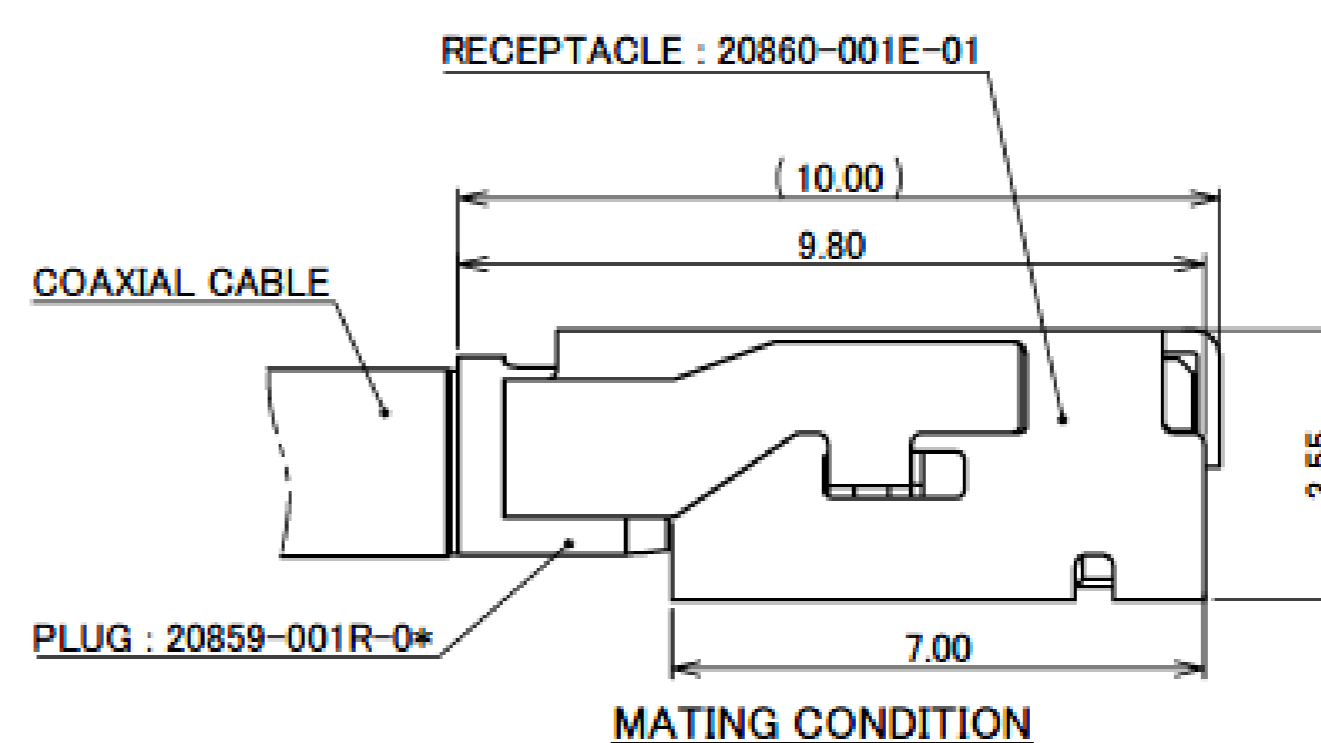
Rev.3

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.

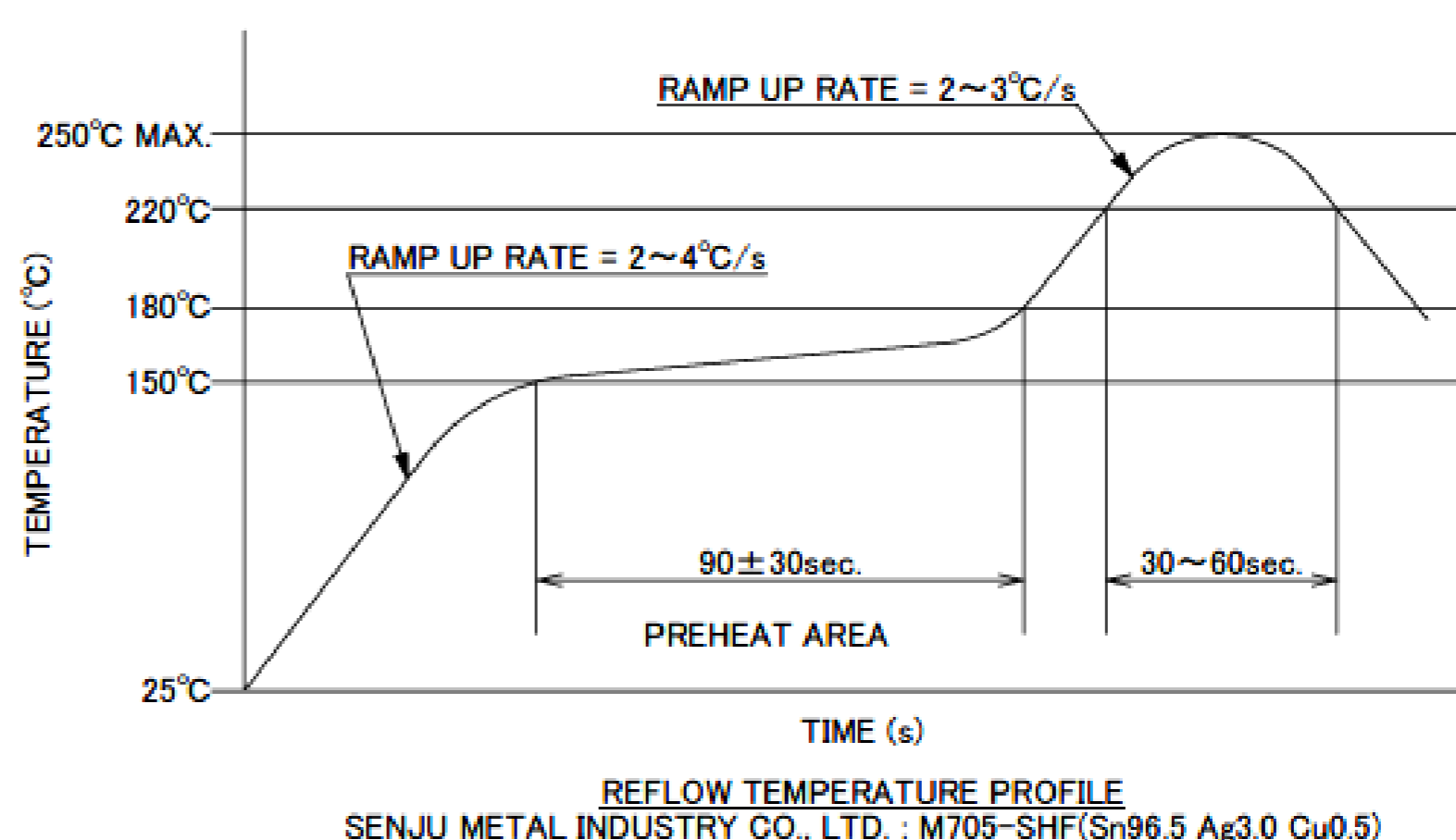
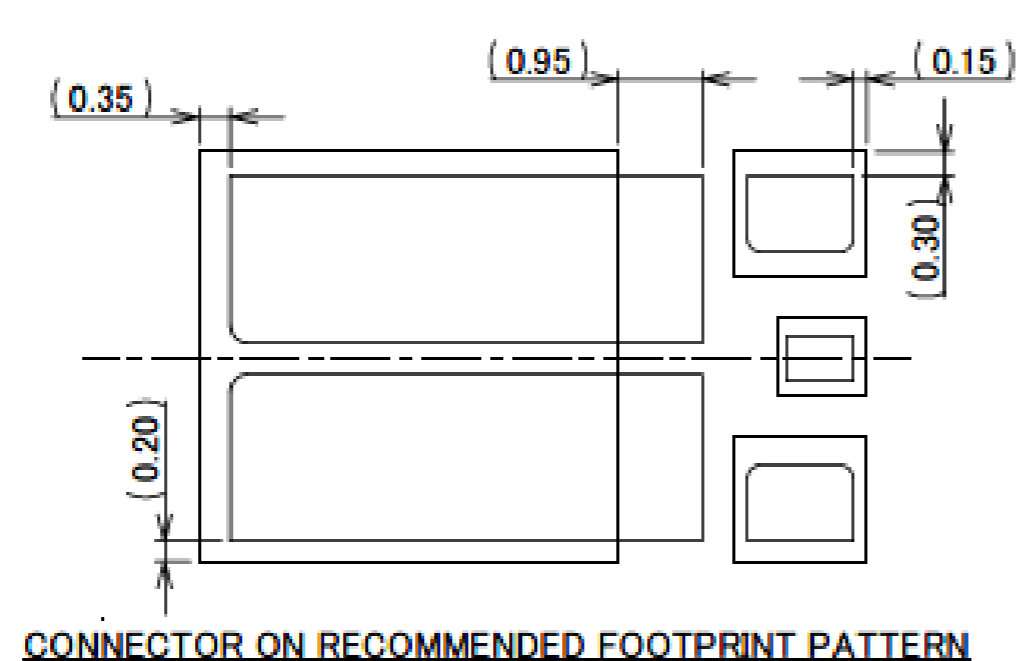
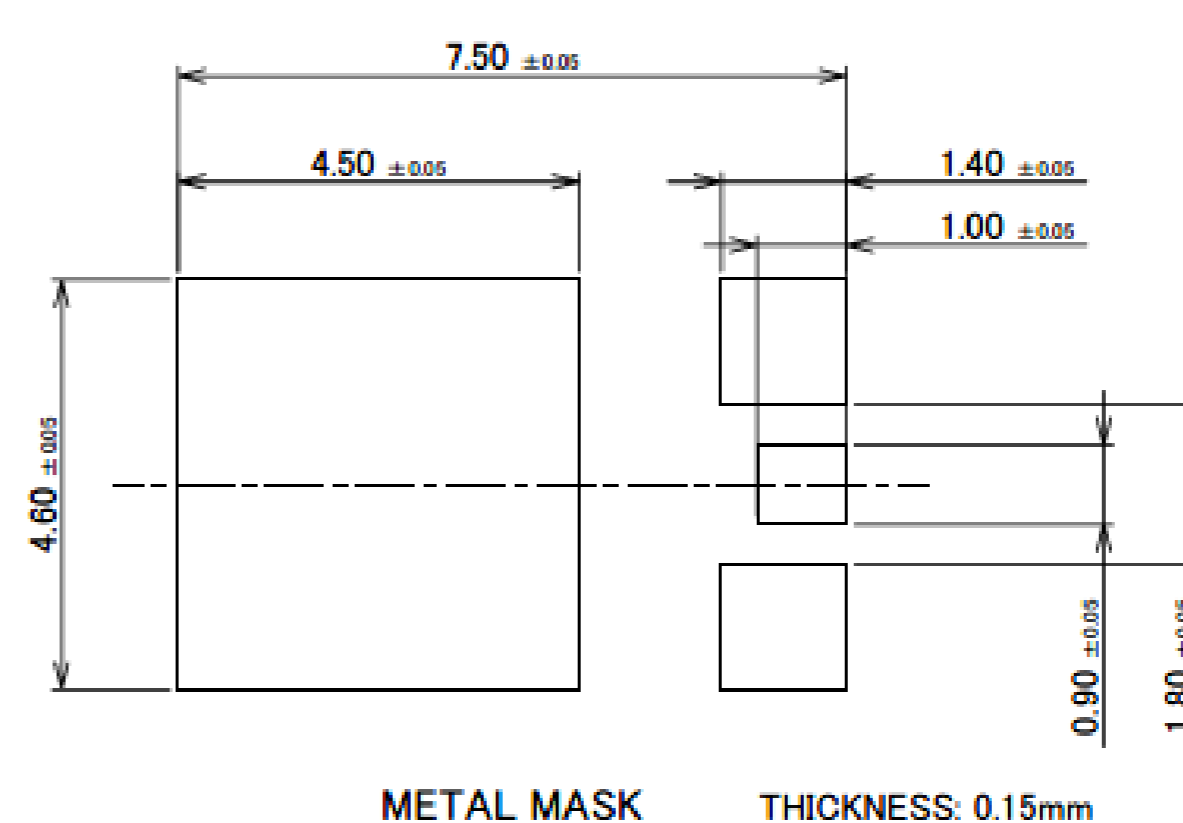
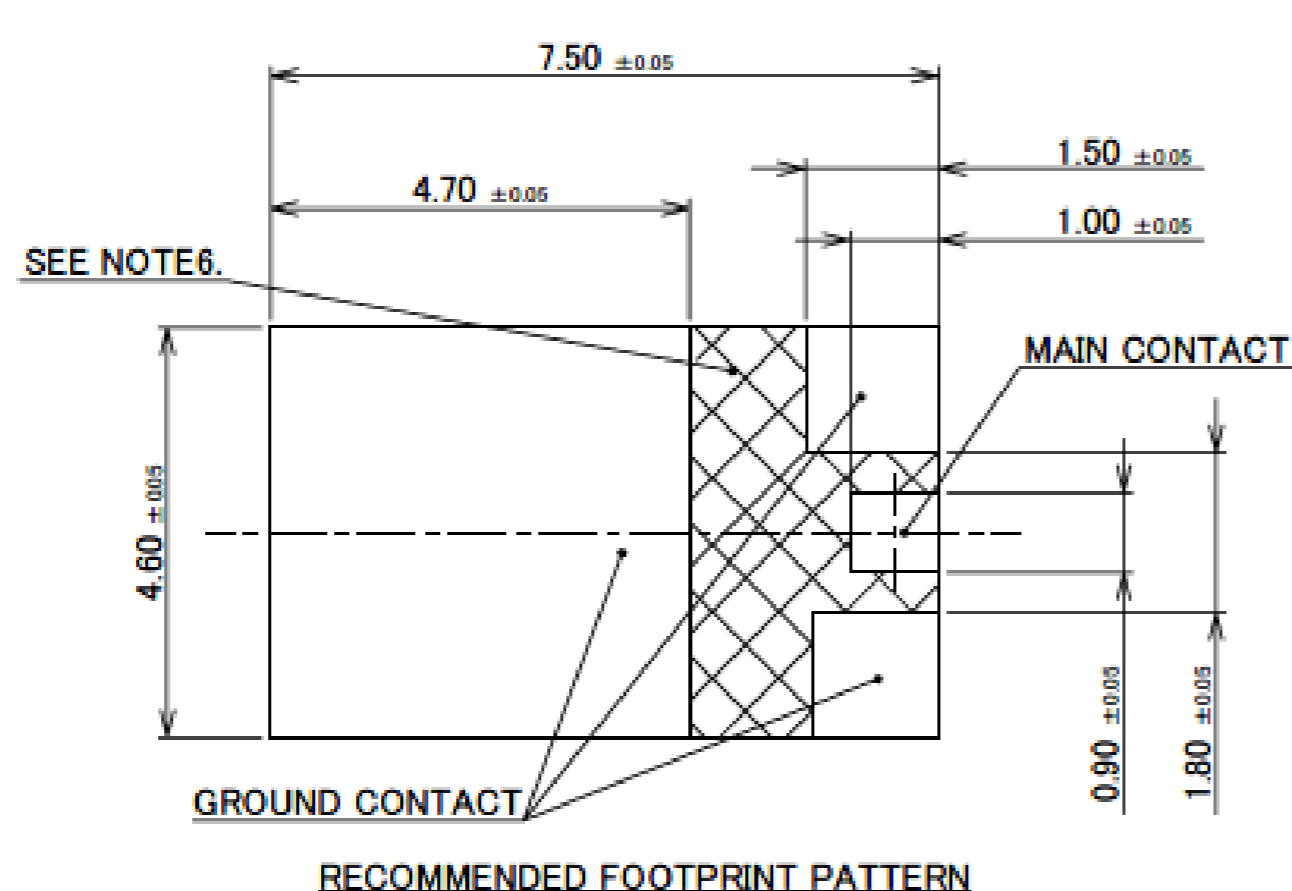


Rev.5

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



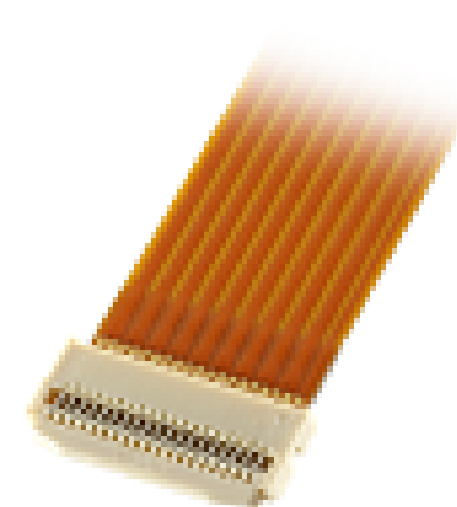
Autolocking FPC/FFC



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



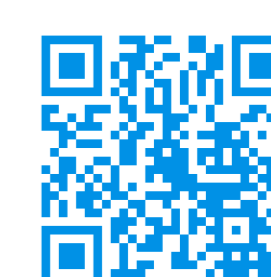
Custom Connectors Available



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