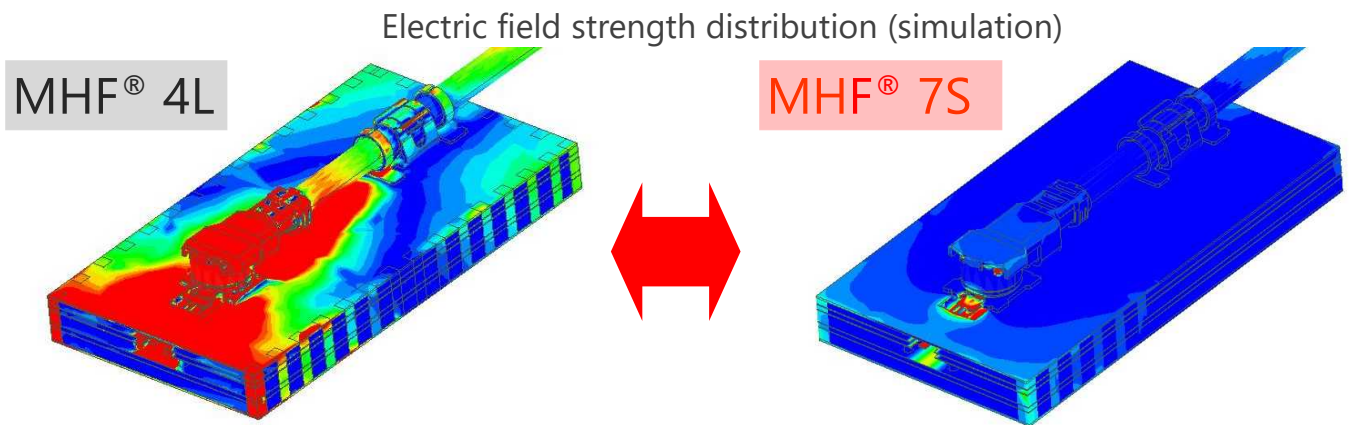




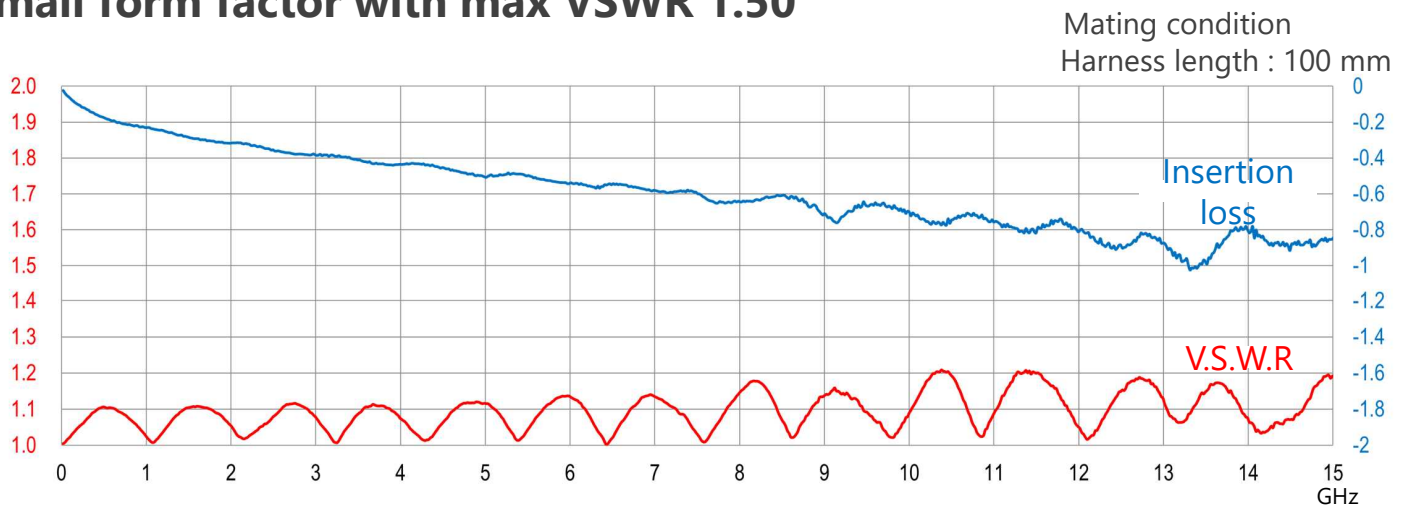
- ✓ Unique shielded design (ZenShield[®]) reduces unwanted EMI found in 5G mmWave applications
- ✓ Small form factor with max VSWR 1.50
- ✓ Industry-first stripline terminated signal pin inside receptacle ground contact

Maximum height (mm)	1.4	
Outside dimension of receptacle (mm)	2.0 x 2.0	
Applicable wire gauge	O.D. 1.13 mm / AWG 32	
Frequency	DC~15 GHz	
VSWR (L=100 mm)	DC~3 GHz	1.30 max.
	3 GHz~6 GHz	1.35 max.
	6 GHz~9 GHz	1.40 max.
	9 GHz~12 GHz	1.45 max.
	12 GHz~15GHz	1.50 max.
Service temp. (Celsius)	-40 degree ~ +90 degree	
Characteristic impedance	50 ohm	
Rated voltage	AC60V	
Contact resistance	20m ohm max.	
Withstand voltage	AC200V/min	
Insulation resistance	500M ohm min./DC100V	

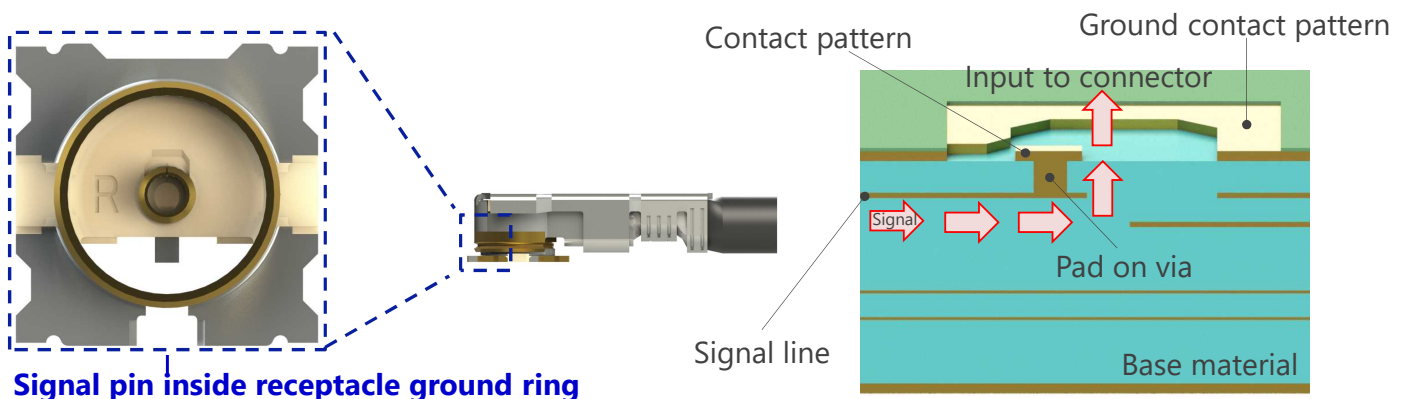
Unique shielded design (ZenShield[®]) reduces unwanted EMI found in 5G mmWave applications



Small form factor with max VSWR 1.50



Industry-first stripline terminated signal pin inside receptacle ground contact



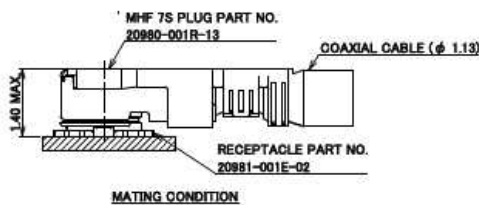
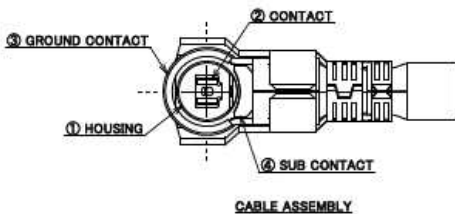
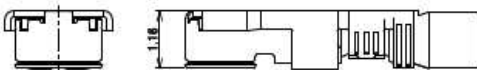
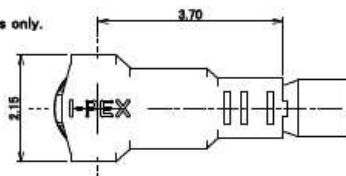
MHF[®] 7S

Component Parts Detail

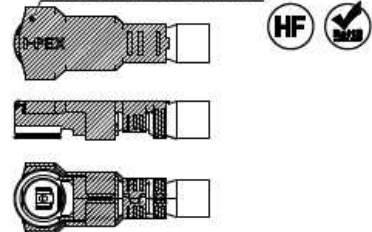
MHF[®] 7S plug

Recommended P/N	20980-001R-13
PART NO.	20980-001R-13

Offered as harness only.



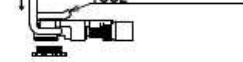
HATCHED AREA: NI PLATING AREA



NOTES

1. APPLICABLE CONNECTOR: 20861-001E-02
2. MATING AND UNMATING INSTRUCTION
 - 2-1. MATING
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE. ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.
 - 2-2. UNMATING
USE THE MATING AND UNMATING TOOL (PART NO. 91186-0001) AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
3. PERMISSIBLE LOAD OF CABLE AT MATING.
4. CHARACTERISTIC IMPEDANCE: 50 Ω (NOMINAL VALUE)

NOTE 2-1. MATING AND UNMATING TOOL



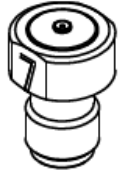
NOTE 2-2.



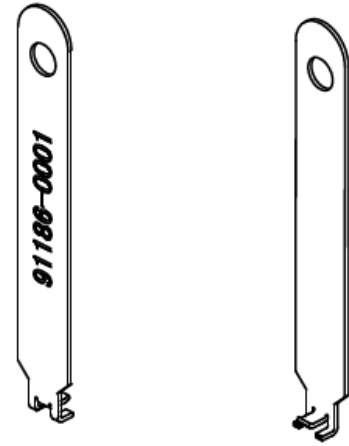
NOTE 3. ↑ PROHIBITED
2N MAX.
→
↓ PROHIBITED

NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
4	SUB CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 1.00 μm MIN. CONTACT PART: Au 0.1 μm MIN.
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 0.7 μm MIN. CONTACT PART: Au 0.1 μm MIN. [NI PLATING AREA] Ni ONLY
2	CONTACT	CORSON ALLOY	ALL OVER: Ni 1.00 μm MIN. CONTACT PART: Au 0.1 μm MIN.
1	HOUSING	LCP	UL94V-0, WHITE
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS

Accessories for MHF® 7S plug



MHF 7 (S) PLUG SMA ADAPTER
PART NO. 91255-0001



MHF 7S MATING AND UNMATING TOOL
PART NO. 91186-0001

Rev.4

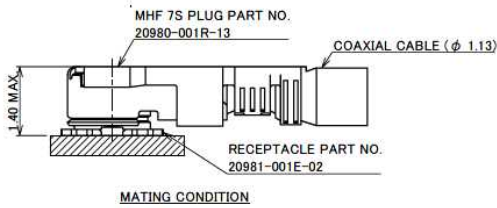
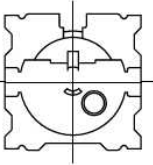
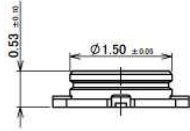
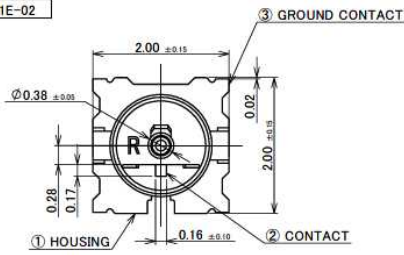
MHF® 7S plug

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20981-001E-02
RATING VOLTAGE	60 V AC (R.M.S)/DC
RATING FREQUENCY	DC~15 GHz
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)
OPERATING HUMIDITY	90% MAX. (NON-CONDENSING)
CHARACTERISTIC IMPEDANCE	50 ohm (NOMINAL VALUE)
VSWR	1.30 MAX. AT 0.1 ~ 3 GHz, 1.35 MAX. AT 3 ~ 6 GHz, 1.40 MAX. AT 6 ~ 9 GHz, 1.45 MAX. AT 9 ~ 12 GHz, 1.50 MAX. AT 12 ~ 15 GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : Δ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : Δ R 20 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	INITIAL: 30N MAX. (VERTICAL DIRECTION) AFTER TEST: 30N MAX. (VERTICAL DIRECTION)
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 20N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 20N MAX., 3N MIN. (VERTICAL DIRECTION)
CRIMP STRENGTH	10N MIN.
PRODUCT SPECIFICATION	PRS-2676
TEST REPORT	TR-20043
INSTRUCTION MANUAL	HIM-19009
APPEARANCE CRITERIA No.	QLS-A***

Rev.4

MHF[®] 7S Receptacle

Recommended P/N 20981-001E-02
 PART NO.
 20981-001E-02



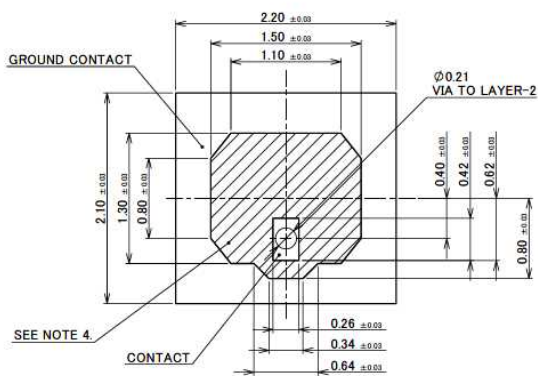
- NOTES
 1. APPLICABLE CONNECTOR
 20980-001R-13
 2. COPLANARITY: 0.08mm MAX.
 3. CHARACTERISTIC IMPEDANCE: 50 Ω (NOMINAL VALUE)

NO	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 1.00 μm MIN. CONTACT PART: 0.05 μm MIN. SOLDERING PART Au AREA: 0.02 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER: Ni 1.00 μm MIN. CONTACT PART: 0.1 μm MIN. SOLDERING PART Au AREA: 0.02 μm MIN.
1	HOUSING	LCP	UL94V-0, WHITE

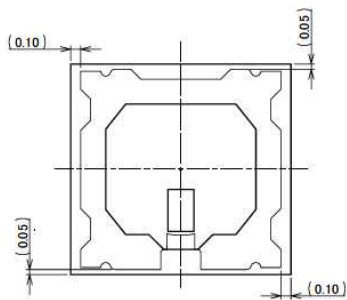
Rev.4

Confidential C

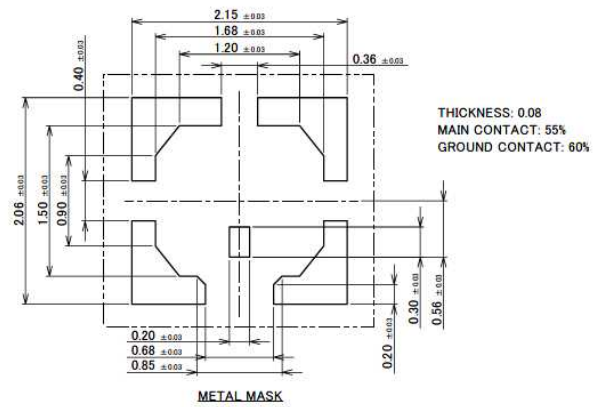
MHF[®] 7S Receptacle



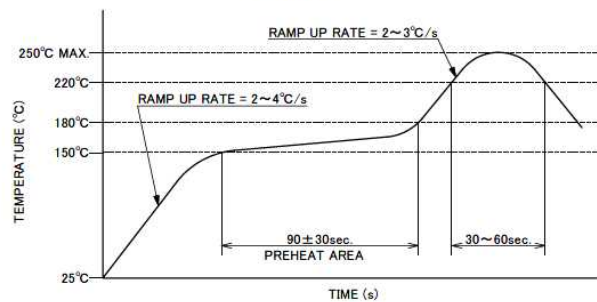
RECOMMENDED FOOTPRINT PATTERN



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



METAL MASK



- NOTES
 4. NO GROUND, SIGNAL, AND RESIST IN THIS AREA.

Rev.4

Confidential C

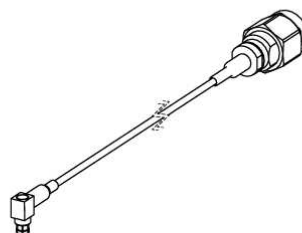
Accessories for MHF® 7S Receptacle



MHF 7 (S) RECEPTACLE SMA ADAPTER
PART NO. 91256-0001



MHF 7 (S) RECEPTACLE HIGH CYCLE N30 SMPM ADAPTER
PART NO. 91145-0001



MHF SERIES N30 SMPM TO SMA ADAPTER CABLE
PART NO. 91197-0300

* 91145-0001AND 91197-0300 SHOULD BE USED TOGETHER.

Rev.4

MHF® 7S Receptacle

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UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 20N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 20N MAX., 3N MIN. (VERTICAL DIRECTION)
CRIMP STRENGTH	10N MIN.
PRODUCT SPECIFICATION	PRS-2676
TEST REPORT	TR-20043
PACKING STANDARD	PST-19094
INSTRUCTION MANUAL	HIM-19009
APPEARANCE CRITERIA No.	QLS-A***

Rev.4



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