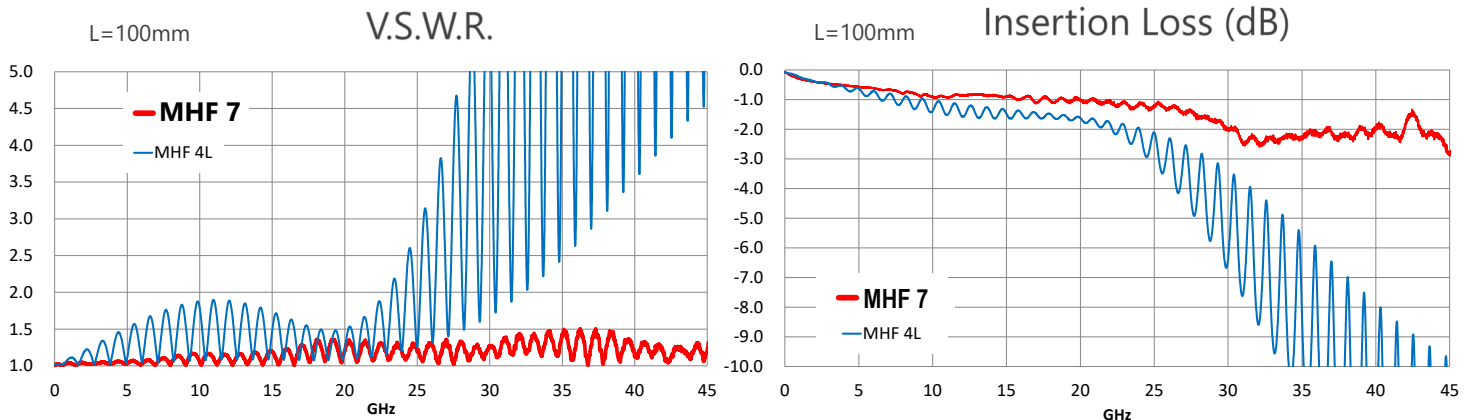




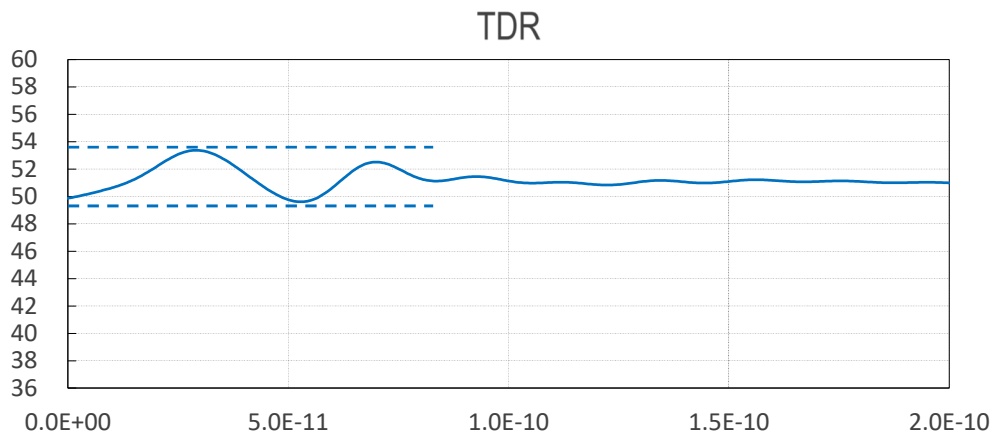
- ✓ Excellent electrical performance through 45 GHz
- ✓ Controlled variation in characteristic impedance
- ✓ MHF® 7 Plug available micro-coax O.D. (AWG) : 1.13 mm (30)

Product name		MHF7
Maximum height (mm)		1.4
Outside dimension of receptacle(mm)		2.1 x 2.0
Applicable wire gauge		O.D. 1.13 mm / AWG 30
Frequency		DC~45 GHz (Nominal)
VSWR (L=100 mm) (Nominal)	DC~5 GHz	1.20 max.
	5 GHz~10 GHz	1.35 max.
	10 GHz~15 GHz	1.50 max.
	15 GHz~20 GHz	1.68 max.
20 GHz~45GHz		1.68 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

Excellent electrical performance through 45 GHz



Controlled variation in characteristic impedance



MHF® 7 Plug available micro-coax O.D. (AWG) : 1.13 mm (30)

Coax O.D. (Center Conductor AWG)	Mating Height 1.4 mm max.
2.00 mm (26)	
1.80 mm (30)	
1.37 mm (30)	
1.32 mm (32)	
1.13 mm (30)	○
1.13 mm (32)	
0.95 mm (33)	
0.81 mm (33)	
0.81 mm (36)	
0.64 mm (36)	
0.48 mm (38)	
FPC	
Receptacle	MHF 7 receptacle

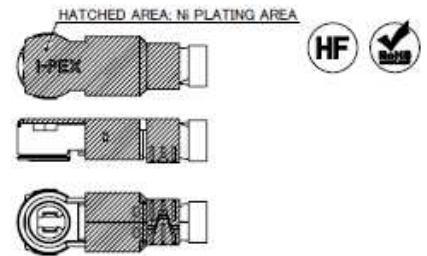
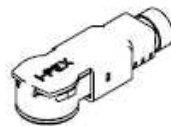
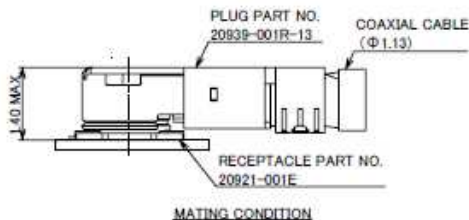
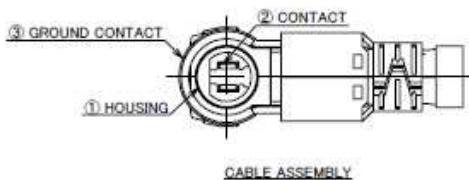
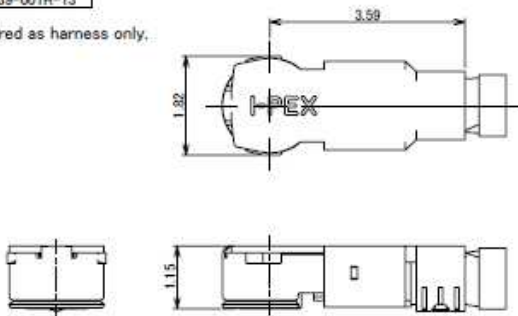
MHF[®] 7

Component Parts Detail

MHF[®] 7 plug

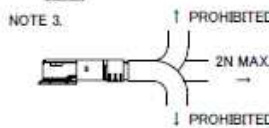
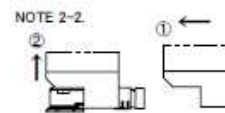
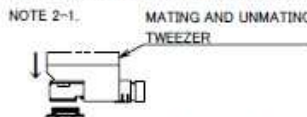
Recommended P/N	20939-001R-13
PART NO.	20939-001R-13

Offered as harness only.



NOTES

1. APPLICABLE CONNECTOR: 20921-001E
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. 91187-0001) 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)



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
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

MHF[®] 7 plug

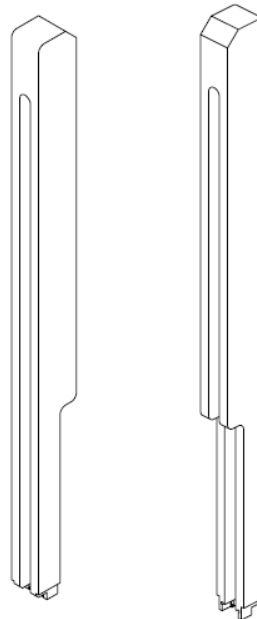
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20921-001E
RATING VOLTAGE	60 V AC (R.M.S)/DC
RATING FREQUENCY	DC~43.5 GHz
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)
OPERATING HUMIDITY	90% MAX. (NON-CONDENSING)
CHARACTERISTIC IMPEDANCE	50 ohm (NOMINAL VALUE)
VSWR	1.433 MAX. AT 0.1 ~ 1.0 GHz, 1.671 MAX. AT 24.25 ~ 43.50 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 R 20 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	INITIAL: 25N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 25N MAX., 5N MIN. (VERTICAL DIRECTION)
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 15N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 15N MAX., 5N MIN. (VERTICAL DIRECTION)
CRIMP STRENGTH	5N MIN.
PRODUCT SPECIFICATION	PRS-2574
TEST REPORT	TR-19022
INSTRUCTION MANUAL	HIM-19008
APPEARANCE CRITERIA No.	QLS-A***

Rev.3

Accessories for MHF[®] 7 plug



MHF 7 PLUG INSPECTION ADAPTER
PART NO. 91106-0001

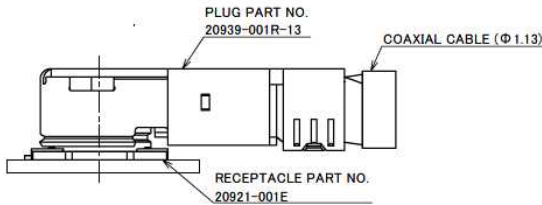
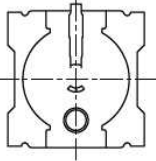
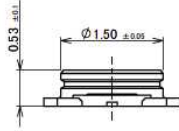
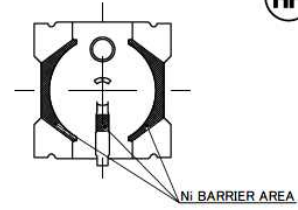
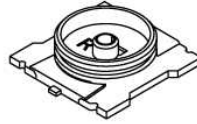
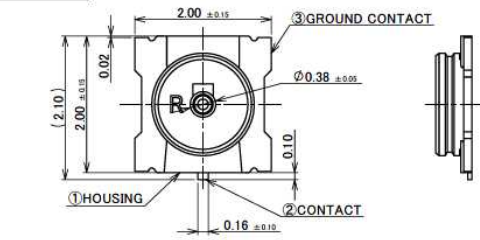


MHF 7 13 TYPE MATING AND UNMATING TWEEZER
PART NO. 91187-0002

Rev.3

MHF[®] 7 Receptacle

Recommended P/N	20921-001E
PART NO.	20921-001E



MATING CONDITION

- NOTES
1. APPLICABLE CONNECTOR
20939-001R-13
 2. COPLANARITY: 0.08mm MAX.
 3. CHARACTERISTIC IMPEDANCE: 50Ω (NOMINAL VALUE)

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

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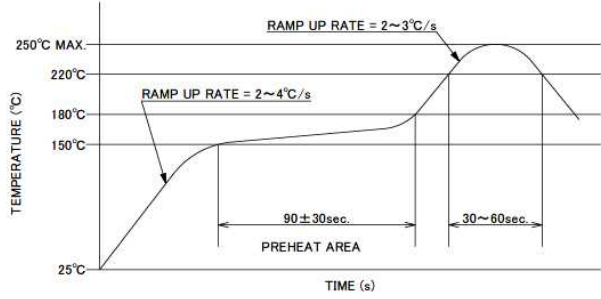
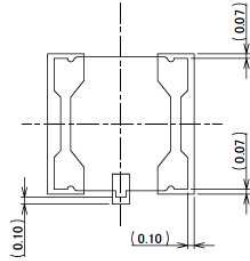
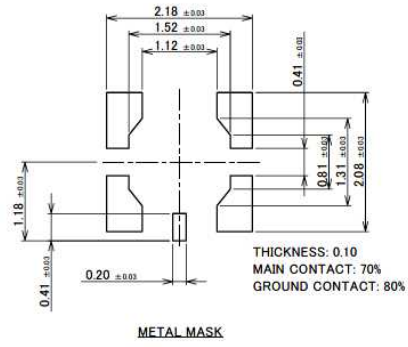
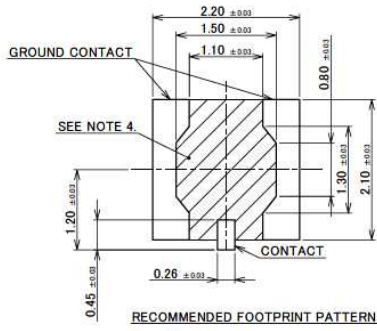
Rev.5

MHF[®] 7 Receptacle

ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20939-001R-13
RATING VOLTAGE	60 V AC (R.M.S)/DC
RATING FREQUENCY	DC ~ 43.5 GHz
OPERATING TEMPERATURE	233 ~ 363 K (-40°C ~ +90°C)
OPERATING HUMIDITY	90% MAX. (NON-CONDENSING)
CHARACTERISTIC IMPEDANCE	50 ohm (NOMINAL VALUE)
VSWR	1.433 MAX. AT 0.1 ~ 1.0 GHz, 1.671 MAX. AT 24.25 ~ 43.50 GHz
MAIN CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : \surdR 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 20 mohm MAX. / AFTER TEST : \surdR 20 mohm MAX.
INSULATION RESISTANCE	INITIAL : 500 Mohm MIN. / AFTER TEST : 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	INITIAL: 25N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 25N MAX., 5N MIN. (VERTICAL DIRECTION)
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 15N MAX., 5N MIN. (VERTICAL DIRECTION) AFTER TEST: 15N MAX., 5N MIN. (VERTICAL DIRECTION)
CRIMP STRENGTH	5N MIN.
PRODUCT SPECIFICATION	PRS-2574
TEST REPORT	TR-19022
PACKING STANDARD	PST-18124
INSTRUCTION MANUAL	HIM-19008
APPEARANCE CRITERIA No.	QLS-A***

Rev.5

MHF[®] 7 Receptacle



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

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Rev.5

Accessories for MHF[®] 7 Receptacle



MHF 7 RECEPTACLE INSPECTION ADAPTER
PART NO. 91107-0001



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



MHF SERIES N30 SMPM TO 240MM ADAPTER CABLE
PART NO. 91137-J300

* 91145-0001 AND 91137-J300 SHOULD BE USED TOGETHER.

Rev.5



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