



- ✓ Small form factor with big performance through 15 GHz
- ✓ MHF<sup>®</sup> 5L plug available cable O.D. (AWG) : 1.13 mm (32), 0.81 mm (33)
- ✓ Solderless micro-coax termination technology "i-Fit<sup>®</sup>" provides consistent performance

Maximum height (mm)	1.3	
Outside dimension of receptacle(mm)	2.0 x 2.0	
Applicable wire gauge	O.D. 1.13 mm / AWG 32 O.D. 0.81 mm / AWG 33	
Frequency	DC~15 GHz	
VSWR (L=100 mm)	DC~3 GHz	1.3 max.
	3GHz~6 GHz	1.4 max.
	6GHz~9 GHz	1.5 max.
	9GHz~12 GHz	1.5 max.
	12GHz~15 GHz	1.6 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	

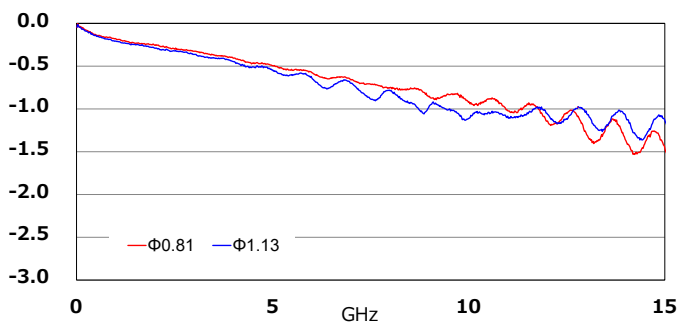
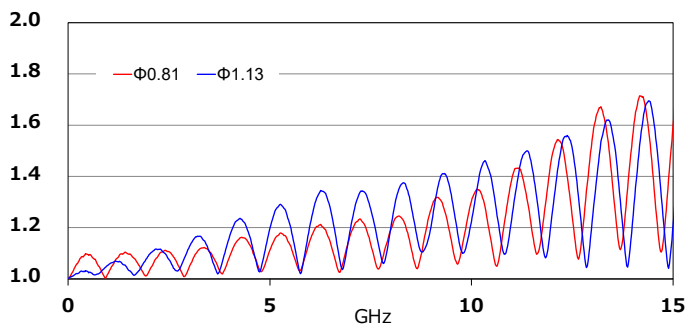
## Small form factor with big performance through 15 GHz

L=100 mm (Harness)

VSWR

L=100 mm (Harness)

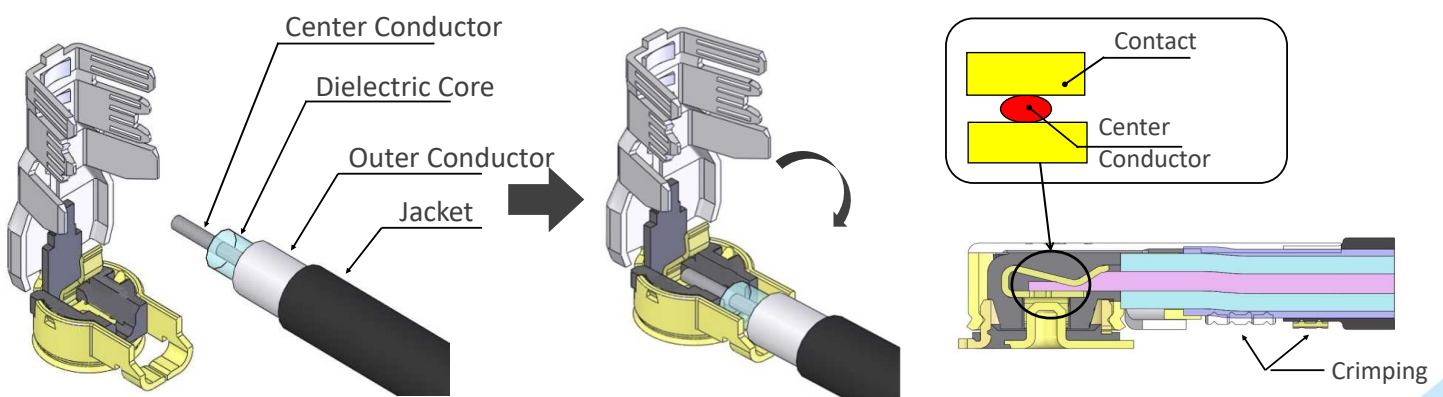
Insertion Loss



## MHF<sup>®</sup> 5L plug available cable O.D. (AWG) : 1.13 mm (32), 0.81 mm (33)

Coax O.D. (Center Conductor AWG)	Mating Height 1.3 mm max.
2.00 mm (26)	
1.80 mm (30)	
1.37 mm (30)	
1.32 mm (32)	
1.13 mm (32)	○
0.95 mm (33)	
0.81 mm (33)	○
0.81 mm (36)	
0.64 mm (36)	
0.48 mm (38)	
Receptacle	MHF 5 receptacle

## Solderless micro-coax termination technology "i-Fit<sup>®</sup>" provides consistent performance



# MHF<sup>®</sup> 5L

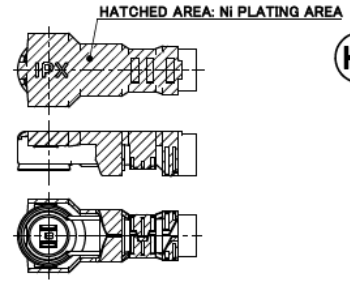
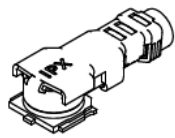
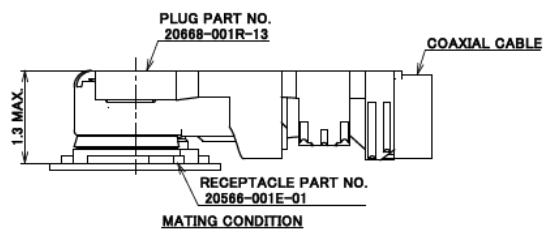
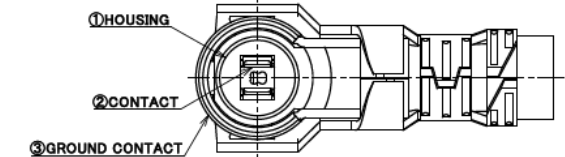
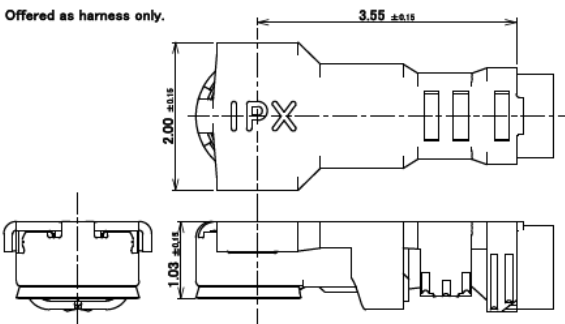
## Component Parts Detail

### MHF<sup>®</sup> 5L plug Ni top (1.13)

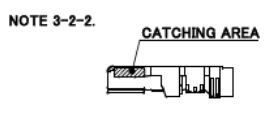
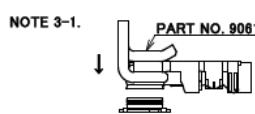
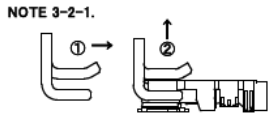
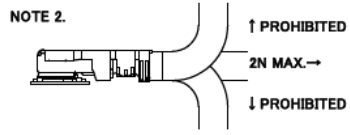
Recommended P/N 20668-001R-13

PART No.  
20668-001R-13

Offered as harness only.



- NOTES.**
1. APPLICABLE CONNECTOR: 20566-001E-01
  2. PERMISSIBLE LOAD OF CABLE AT MATING
  3. MATING AND UNMATING INSTRUCTION
- 3-1. MATING  
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.
- 3-2. UNMATING
- 3-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90612-0001)  
USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.
- 3-2-2. IN CASE OF UNMATING DIRECTLY BY HAND  
CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.



NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN. [Ni PLATING AREA] Ni ONLY
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK (GF 30%)

# MHF<sup>®</sup> 5L plug Ni top (1.13)

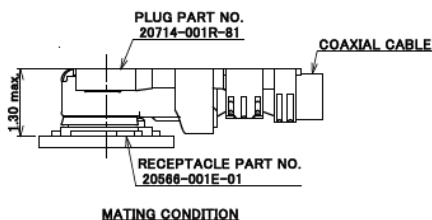
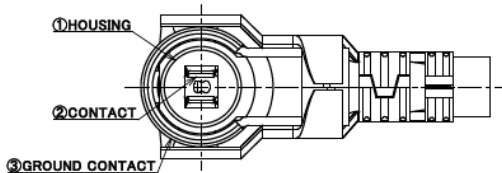
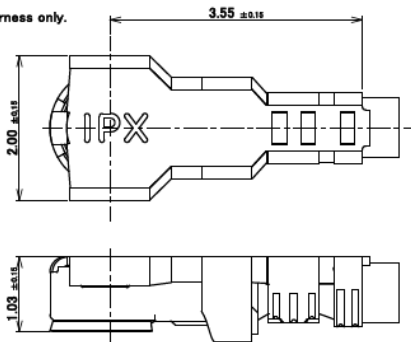
ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20566-001E-01
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC~12 GHz
OPERATING TEMPERATURE	233~383K (-40°C~+90°C)
VSWR	1.3 MAX. AT DC~3 GHz, 1.4 MAX. AT 3~6 GHz, 1.5 MAX. AT 6~12 GHz
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\angle$ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\angle$ R 100 mohm MAX.
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE
DURABILITY	30 CYCLES
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 5 N MIN. / AFTER TEST: 3 N MIN.
CRIMP STRENGTH	10 N MIN.
PRODUCT SPECIFICATION	PRS-2192
TEST REPORT	TR-16003
INSTRUCTION MANUAL	HIM-16014
APPEARANCE CRITERIA No.	QLS-A***

Rev.3

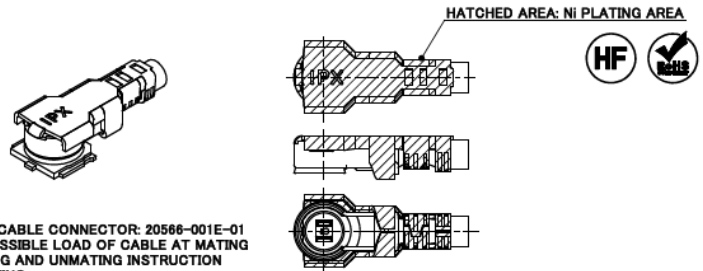
# MHF<sup>®</sup> 5L plug Ni top (0.81)

Recommended P/N	20714-001R-81
PART No.	20714-001R-81

Offered as harness only.



MATING CONDITION



NOTES.

1. APPLICABLE CONNECTOR: 20566-001E-01
2. PERMISSIBLE LOAD OF CABLE AT MATING
3. MATING AND UNMATING INSTRUCTION

3-1. MATING

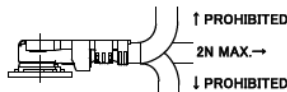
MATE THE CONNECTOR VERTICALLY AS MUCH AS POSSIBLE, ADJUSTING THE MATING AXIS OF PLUG AND RECEPTACLE. DO NOT SLANT MATE.

3-2. UNMATING

3-2-1. IN CASE OF UNMATING BY PULLING TOOL (PART NO. 90612-0001) USE THE PULLING TOOL AS THE FOLLOWING DRAWING, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

3-2-2. IN CASE OF UNMATING DIRECTLY BY HAND CATCH THE CATCHING AREA OF PLUG, AND PULL PLUG TO VERTICAL DIRECTION AS DIRECTLY AS POSSIBLE.

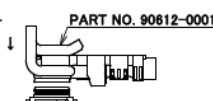
NOTE 2.



NOTE 3-2-1.



NOTE 3-1.



NOTE 3-2-2.



NO.	DESCRIPTION	MATERIAL	FINISH , REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN. [Ni PLATING AREA] Ni ONLY
2	CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN. CONTACT PART Au 0.05 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK (GF 30%)

Rev.3

# MHF® 5L plug Ni top (0.81)

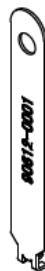
ITEMS	SPECIFICATION
RECOMMENDED APPLICABLE CONNECTOR PART No.	20566-001E-01
RATING VOLTAGE	60 V AC (R.M.S)
RATING FREQUENCY	DC~12 GHz
OPERATING TEMPERATURE	233~363 K (-40°C~+90°C)
VSWR	1.3 MAX. AT DC~3 GHz, 1.4 MAX. AT 3~6 GHz, 1.5 MAX. AT 6~12 GHz
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\Delta$ R 20 mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\Delta$ R 100 mohm MAX.
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE
DURABILITY	30 CYCLES
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 5 N MIN. / AFTER TEST: 3 N MIN.
CRIMP STRENGTH	10 N MIN.
PRODUCT SPECIFICATION	PRS-2236
TEST REPORT	TR-16049
INSTRUCTION MANUAL	HIM-16014
APPEARANCE CRITERIA No.	QLS-A***

Rev.3

## Accessories for MHF® 5L plug Ni top



**SMA ADAPTOR FOR MHF 5 PLUG**  
PART NO. 90543-0001



FRONT SIDE



BACK SIDE

**MHF 5 PUSHING AND PULLING TOOL**  
PART NO. 90612-0001

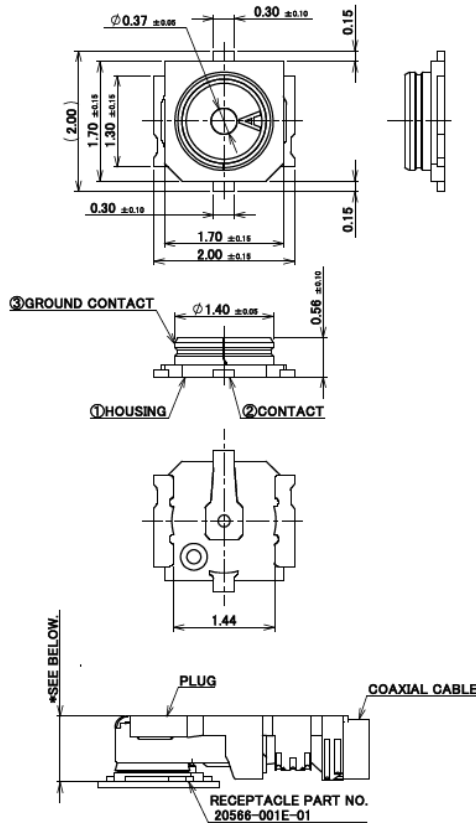


**MHF 5 PUSHING TOOL**  
PART NO. 90624-0001

Rev.3

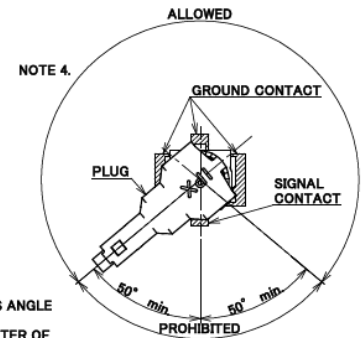
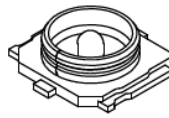
# MHF® 5 Receptacle

Recommended P/N	20566-001E-01
PART NO.	20566-001E-01



- \* 1.3 MAX. AT 20688-001R-13, 20714-001R-81
- \* 1.0 MAX. AT 20711-001R-81

### MATING CONDITION



### NOTES

- APPLICABLE CONNECTOR  
20567-001R-81  
20615-00\*R-48  
20688-001R-13  
20689-001R-81  
20711-001R-81  
20714-001R-81
- COPLANARITY: 0.1mm MAX.
- THIS IS "Pb-FREE" CONNECTOR.
- PRECAUTIONS FOR CABLE POSITION  
[PART NO. 20567-001R-81, 20615-00\*R-48]  
THE PLUG SHALL NOT BE PLACED WITHIN 50 DEGREES ANGLE FROM CENTER OF THE SIGNAL CONTACT.  
TILT THE PLUG AT LEAST 50 DEGREES FROM THE CENTER OF A SIGNAL CONTACT.

NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	GROUND CONTACT	PHOSPHOR BRONZE	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.01 $\mu$ m MIN. UNDER PLATE Pd-Ni 0.02 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN. UNDER PLATE Pd-Ni 0.02 $\mu$ m MIN.
2	CONTACT	BRASS	ALL OVER Ni 1.00 $\mu$ m MIN. CONTACT PART Au 0.1 $\mu$ m MIN. SOLDERING PART Au 0.03 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK

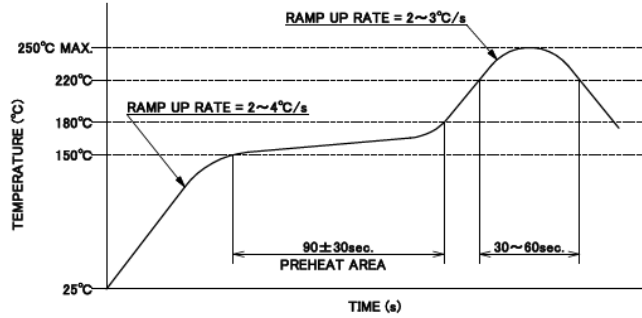
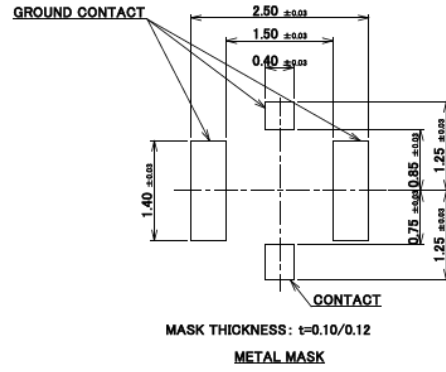
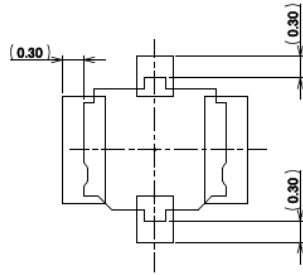
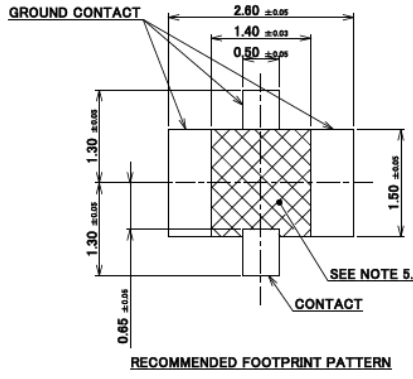
Rev.6

# MHF® 5 Receptacle

ITEMS	SPECIFICATION		
RECOMMENDED APPLICABLE CONNECTOR PART No.	20688-001R-13	20711-001R-81 (CABLE AWG#36 $\phi$ 0.81)	20714-001R-81
RATING VOLTAGE	80 V AC (R.M.S)		
RATING FREQUENCY	DC~12 GHz		
OPERATING TEMPERATURE	233~383 K (-40°C~+90°C)		
VSWR	1.3 MAX. AT DC~3 GHz, 1.4 MAX. AT 3~6 GHz, 1.5 MAX. AT 6~12 GHz		
MAIN CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\Delta$ R 20 mohm MAX.		
GROUND CONTACT RESISTANCE	INITIAL: 20 mohm MAX. / AFTER TEST: $\Delta$ R 100 mohm MAX.		
INSULATION RESISTANCE	INITIAL: 500 Mohm MIN. / AFTER TEST: 100 Mohm MIN.		
DIELECTRIC WITHSTANDING VOLTAGE	200 V AC, 1 MINUTE		
DURABILITY	30 CYCLES		
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 5 N MIN. AFTER TEST: 3 N MIN.	INITIAL: 4 N MIN. AFTER TEST: 2 N MIN.	INITIAL: 5 N MIN. AFTER TEST: 3 N MIN.
PRODUCT SPECIFICATION	PRS-2192	PRS-2108	PRS-2236
TEST REPORT	TR-16003	TR-15062	TR-16049
PACKING STANDARD	PST-12036		
INSTRUCTION MANUAL	HIM-16014	HIM-16013	HIM-16014

Rev.6

# MHF<sup>®</sup> 5 Receptacle



NOTES.  
5. CUT OUT PROHIBITION AREA

Rev.6

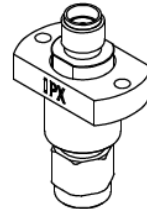
## Accessories for MHF<sup>®</sup> 5 Receptacle



**SMA ADAPTOR FOR MHF 5 PLUG**  
PART NO. 90543-0001

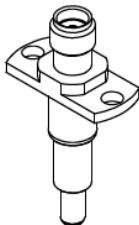


**MHF 5 HIGH CYCLE PROBE**  
PART NO. 90690-0001

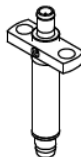


**MHF 5 HIGH CYC ADAP BASE UNIT**  
PART NO. 90684-0001

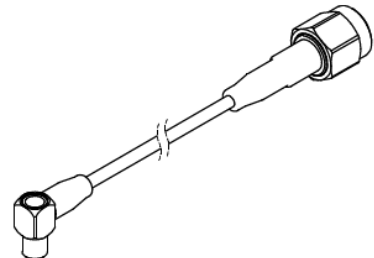
\* 90690-0001 AND 90684-0001 SHOULD BE USED TOGETHER.



**MHF 5 HIGH CYCLE ADAPTOR**  
PART NO. 90793-0001



**MHF 5 4.5MM HIGH CYCLE TEST PROBE LONG TYPE**  
PART NO. 90847-0001



**4.5MM HIGH CYCLE TEST PROBE CABLE ASSY**  
PART NO. 90577-\*\*\*\*

\* 90847-0001 AND 90577-\*\*\*\* SHOULD BE USED TOGETHER.

Rev.6



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