# CUSTOMER PRODUCT SPECIFICATION SHEET



# CAB412RF: I-PFX MHF PI UG + S/S SMA FFMAI F STRAIGHT BULKHEAD JACK W/O-RING RATED TO IP68/69K + MULTIPLE CABLE SIZES

### SPECIFICATIONS:

1. I-PEX MHF PLUG, GOLD PLATED, P/N:

FOR RG178 CABLE: 20278-112R-18.

FOR Ø1.13MM CABLE: 20278-112R-13

FOR Ø1.32MM DS CABLE: 20278-112R-32.

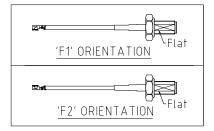
- 2. COAXIAL CABLE, SEE P/N OPTIONS FOR DETAIL.
- 3. SMA STRAIGHT BULKHEAD JACK W/O-RING W/SUS303 STAINLESS STEEL BODY, TESTED TO IP68/69K, P/N: RFCT-SMA061-F78 (WITH SILICON O-RING) OR RFCT-SMA061-F78-1 (WITH EPDM 0-RING).

## ENVIRONMENTAL:

- A. BULKHEAD MOUNTED CONNECTOR (RFCT-SMA061-F78) TESTED TO THE FOLLOWING SPECIFICATION:
- i. IP6X DUST TIGHT NO PARTICLE INGRESS.
- ii. IPX8 WATERPROOF FOR 48 HOURS AT 1 METER UNDERWATER.
- iii. IPX9K WATER SPRAY, 14-16L PER MINUTE, AT 8,000-10,000 KPA, AT 100-150MM DISTANCE FOR 30 SECONDS.

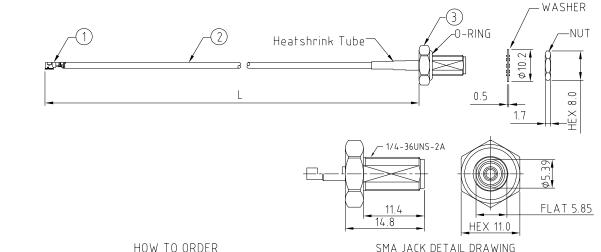
### NOTES:

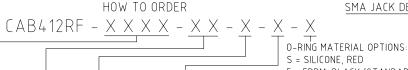
- 1. THE ORIENTATION OF CONNECTORS ON DRAWING IS FOR REFERENCE ONLY, IF THE ORDER IS LEFT BLANK THE CONNECTOR WILL NOT HAVE FIXED ORIENTATION.
- 2. FIXED ORIENTATION IS SUGGESTED FOR CABLE LENGTH 25MM TO 100MM
- PLEASE SPECIFY THE FIXED ORIENTATIONS FROM THE ORDER CODE (F1, F2, ETC)
- 3. CONTACT GRADCONN IF THE ORIENTATION YOU REQUIRE IS NOT SHOWN.
- 4. WORKING FREQUENCY RANGE: DC-3GHz.
- 5. OPERATING TEMPERATURE: -40°C TO +85°C
- 6. IMPEDANCE: 50 OHM
- 7. IF THE CONNECTOR IS USED IN A CORROSIVE ENVIRONMENT, WE RECOMMEND THE CONNECTOR FACE IS PROTECTED WITH A STAINLESS STEEL DUST CAP.
- 8. PLEASE USE THE RECOMMENDED TORQUE FORCES FOR STAINLESS STEEL CONNECTORS. THIS IS PUBLISHED ON GRADCONN.COM RESOURCES PAGE.



# USAGE PRECAUTIONS: CABLES USING 'MICRO' COAX ARE DELICATE:

- (i) HANDLE WITH CARE
- (ii) DO NOT TWIST: APPLY EXCESSIVE FORCES OR SHARP BENDS TO THE CABLE. DO NOT FORCEFULLY DEFORM WIRES.
- (iii) CONSULT CONNECTOR MANUFACTURER'S DATASHEFTS FOR DETAILED NOTES. ON HANDLING INSTRUCTIONS.





CABLE SIZE OPTIONS:

1 = RG178 CABLE, COLOR: BROWN.

 $2 = \phi 1.13MM$  CABLE, COLOR: GRAY.

 $3 = \phi 1.32MM$  DS CABLE, COLOR: GRAY

"L" LENGTH IN MM: eg: 100MM = 0100(MIN. 0050-MAX.0400 STANDARD = 0100, 0150, 0200) Tolerance: 50mm: ±2mm. 51-200mm: ±5mm.

201-400mm: ±7mm.

WASHER AND NUT OPTIONS: BLANK = SEPARATELY PACKED (STANDARD)

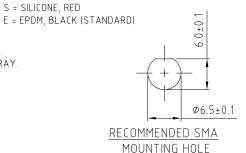
A = ALL ASSEMBLED WITH CONNECTOR

ORIENTATION OPTIONS:

BLANK = DOES NOT HAVE A FIXED ORIENTATION F1 = MHF CONNECTION DOWN (L=50-200MM)

F2 = MHF CONNECTION UP (L=50-200MM)

(SEE NOTES 1, 2, 3 AND DIAGRAMS FOR MORE INFORMATION)



| DATE & DRN                                    |
|---|
| 2/06/'20 - NYW RELEASE                        |
| :0/06/'20 - NYW<br>1END O-RING ORDERING CODES |
| 28/09/'20 - NYW<br>DATE P/N NUMBERING.        |
| 23/11/'20 - NYW<br>DD IPX9K TESTING INFO.     |
| 27/04/"21 - NYW<br>0D NOTE 7.                 |
| 35/07/'21 - NYW<br>MEND NOTE 7.               |
| IS/10/'21 - NYW<br>0D CABLE SIZE OPTION 2.    |
| 21/12/'22 - NYW<br>3D NOTE 8.                 |
| 38/06/723 - NYW                               |

6

| Scale: NTS       | THIRD ANGLE          | Unstated Tolerances:<br>.X N/A<br>.XX N/A |
|------------------|----------------------|---|
| Drawn: NYW       | <del></del>          | XXX N/A ANGLES N/A                        |
| App'd: XXX       | Title CABLE ASSEMBLY |   |
| Date: 8 JUN. '23 | Revision: 1.8        | Unit: mm                                  |





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| Drawing Number: |           |  |  |
|-----------------|-----------|--|--|
| CAB412RF        |           |  |  |
| Sheet 1         | of 1      |  |  |
| Drawing (C)     | F and 0 F |  |  |