

COAXIAL CABLE ASSEMBLY

CUSTOMER PRODUCT SPECIFICATION SHEET

RoHS Compliant

CAB412RF: I-PEX MHF PLUG + S/S SMA FEMALE 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 O-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 GCT 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 GCT.CO 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 DATASHEETS FOR DETAILED NOTES ON HANDLING INSTRUCTIONS.

RECOMMENDED SMA MOUNTING HOLE

HOW TO ORDER

CAB412RF - X X X X - X X - X - X - X

"L" LENGTH IN MM:  
eg: 100MM = 0100  
(MIN. 0050-MAX.0400)  
STANDARD = 0100, 0150, 0200)  
Tolerance: 50mm: ±2mm.  
51-200mm: ±5mm.  
201-400mm: ±7mm.

CABLE SIZE OPTIONS:  
1 = RG178 CABLE, COLOR: BROWN.  
2 = Ø1.13MM CABLE, COLOR: GRAY.  
3 = Ø1.32MM DS CABLE, COLOR: GRAY.

O-RING MATERIAL OPTIONS:  
S = SILICONE, RED  
E = EPDM, BLACK (STANDARD)

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)

REV. DATE & DRN

10 22/06/20 - NYW RELEASE

11 20/06/20 - NYW ORDERING CODES

12 28/09/20 - NYW UPDATE P/N NUMBERING

13 23/11/20 - NYW ADD IPXK TESTING INFO.

14 ADD NOTE 1 - NYW

15 05/07/21 - NYW AMEND NOTE 7.

16 15/07/21 - NYW ADD CABLE SIZE OPTION 2.

17 ADD NOTE 8.

18 08/06/23 - NYW ADD CABLE SIZE OPTION 3.

19 20/01/24 - CC ADD IP RATING VIEW

20 16/02/25 - CC Add GCT logo.

Scale: NTS

Drawn: CC

App'd: XXX

Date: 16 FEB. '25

THIRD ANGLE

Unstated  
.X  
.XX  
.XXX  
ANGLES

Tolerances:  
N/A  
N/A  
N/A  
N/A

Title CABLE ASSEMBLY

Revision: 2.0

Unit: mm

IP Rated  
RF Products

www.gct.co  
www.gradconn.com

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CAB412RF

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