

CABLE 161 RF: I-PEX MHF + SMA STRAIGHT BULKHEAD JACK WITH O-RING RATED TO IP67/68 + MULTIPLE CABLE SIZES

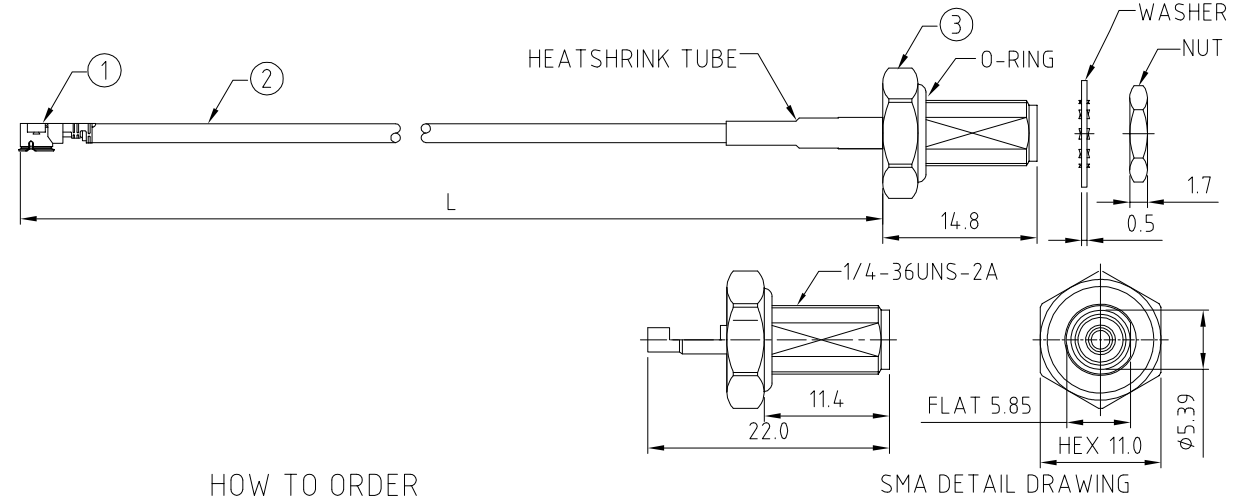
- SPECIFICATIONS :**
- I-PEX MHF PLUG, P/N: FOR RG178 CABLE: 20278-112R-18.  
FOR  $\phi 1.37$ MM CABLE: 20351-112R-37.  
FOR  $\phi 1.13$ MM CABLE: 20278-112R-13  
FOR  $\phi 1.32$ DS & 1.32MM CABLE: 20278-112R-32.  
FOR  $\phi 0.81$ MM CABLE: 20278-112R-08
  - COAXIAL CABLE, SEE P/N OPTIONS.
  - SMA STRAIGHT BULKHEAD JACK WITH O-RING RATED TO IP67/68, P/N: RFCT-SMA002-F78.

**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.

- ENVIRONMENTAL:**
- A. BULKHEAD MOUNTED CONNECTOR (RFCT-SMA002-F78) TESTED TO THE FOLLOWING SPECIFICATION:
- IP6X - DUST TIGHT - NO PARTICLE INGRESS.
  - IPX7 WATERPROOF FOR 30 MINUTES UP TO 1 METER UNDERWATER.
  - IPX8 WATERPROOF FOR 48 HOURS AT 1 METER UNDERWATER.
  - IPX8 WATERPROOF FOR 12 HOURS AT 5 METERS UNDERWATER.
  - PRESSURE TEST - 1 BAR FOR 10 SECONDS.

- NOTES:**
- THE ORIENTATION OF CONNECTORS ON DRAWING IS FOR REFERENCE ONLY, IF THE ORDER IS LEFT BLANK THE CONNECTOR WILL NOT HAVE FIXED ORIENTATION.
  - FIXED ORIENTATION IS SUGGESTED FOR CABLE LENGTH 25MM TO 100MM. PLEASE SPECIFY THE FIXED ORIENTATIONS FROM THE ORDER CODE (F1, F2, ETC)
  - CONTACT GRADCONN IF THE ORIENTATION YOU REQUIRE IS NOT SHOWN.
  - WORKING FREQUENCY RANGE: DC-3GHz.
  - OPERATING TEMPERATURE: -40°C~+85°C.
  - IMPEDANCE: 50 Ohm.



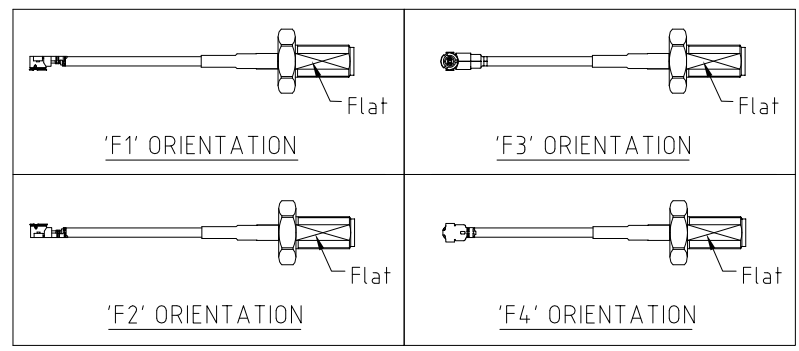
**HOW TO ORDER**

CABLE 161 RF - XXX - XXX - X - X - XX

"L" LENGTH IN MM:  
eg: 100MM = 100  
(MIN. 025-MAX.400  
STANDARD = 100, 150, 200)  
Tolerance: 50-200mm: ±5mm.  
201-400mm: ±7mm.

HEATSHRINK TUBE OPTIONS:  
BLANK = WITH H/S TUBE (STANDARD)  
NT = WITHOUT H/S TUBE

CABLE SIZE OPTIONS:  
1 = RG178 CABLE, COLOR: BROWN  
2 =  $\phi 1.37$ MM CABLE, COLOR: BLACK  
3 =  $\phi 1.13$ MM LOW LOSS CABLE, COLOR: GREY  
4 =  $\phi 1.13$ MM CABLE, COLOR: GREY  
5 =  $\phi 1.32$ DS CABLE, COLOR: GREY  
6 =  $\phi 1.13$ MM CABLE, COLOR: BLACK  
7 =  $\phi 1.32$ MM CABLE, COLOR: GREY  
8 =  $\phi 0.81$ MM CABLE, COLOR: GREY



**ORIENTATION OPTIONS:**  
BLANK = DOES NOT HAVE A FIXED ORIENTATION  
F1 = MHF CONNECTION DOWN (L=25-200MM)  
F2 = MHF CONNECTION UP (L=25-200MM)  
F3 = MHF CONNECTION AND D FLAT SAME ORIENTATION (L=25-200MM)  
F4 = MHF CONNECTION AND D FLAT OPPOSITE ORIENTATION (L=25-200MM)  
(SEE NOTES 1, 2, 3 AND DIAGRAMS FOR MORE INFORMATION)

**O-RING, WASHER AND NUT OPTIONS:**  
BLANK = O-RING ASSEMBLED, WASHER AND NUT SEPARATELY PACKED (STANDARD)  
A = ALL ASSEMBLED WITH CONNECTOR  
D = ALL PACKED SEPARATELY

**RECOMMENDED SMA MOUNTING HOLE**

REV. DATE & DRN	10 26/11/13 - NYW RELEASE
11 28/07/14 - NYW	AREND SMA P/N
12 23/07/15 - NYW	ADD 0.131 CABLE OPTION
13 07/06/16 - NYW	UPDATE SMA PART NUMBER
14 18/07/16 - CAO	ADD 0.132 DS CABLE OPTION
15 19/08/16 - RJH	ADD CABLE OPTION NO. 3
16 02/05/17 - NYW	REMOVE MHF CAP OPTION B
17 27/06/17 - NYW	ADD ASSEMBLY OPTION B
18 08/11/17 - NYW	ADD CABLE OPTION 5.
19 17/01/18 - NYW	ADD F3, F4 ORIENTATION OPTIONS
20 27/09/18 - NYW	ADD 1.13 BLACK CABLE OPTION
21 20/03/19 - NYW	ADD 1.32 CABLE OPTION
22 27/05/19 - NYW	REMOVE MHF CAP OPTION (B)
23 18/07/19 - NYW	ADD OPERATING TEMP.
24 12/07/19 - NYW	ADD 0.81 CABLE OPTION
25 05/07/20 - NYW	ADD NOTE 6
26 06/12/22 - NYW	ADD 0.81 DS CABLE OPTION
27 29/04/22 - NYW	ADD ACCESSORY OPTION D
	AREND NOTE 5

Scale: NTS	THIRD ANGLE	Unstated Tolerances:
Drawn: RJH		X N/A XX N/A XXX N/A ANGLES N/A
App'd: XXX	Title CABLE ASSEMBLY	
Date: 29 APR. '22	Revision: 2.7	Unit: mm

		Type: Cable 161 RF
IP67/68 Rated Cables		CABLE 161 RF
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