



CABLE 138 RF: IPEX MHF PLUG + RP SMA STRAIGHT BULKHEAD JACK WITH O-RING RATED TO IP67/68 + MUTIPLE CABLES SIZES

SPECIFICATIONS:

1. IPEX MHF PLUG FOR $\phi 1.13\text{MM}$ CABLE: 20278-112R-13, FOR $\phi 1.37\text{MM}$ CABLE: 20351-112R-37, FOR RG178 CABLE: 20278-112R-18, FOR $\phi 1.32\text{MM}$ DS CABLE: 20278-112R-32.
2. COAXIAL CABLE, SEE P/N OPTIONS.
3. RP SMA ST BULKHEAD JACK WITH O-RING RATED TO IP67/68, PN: RFCT-SMA008-F78, GOLD.

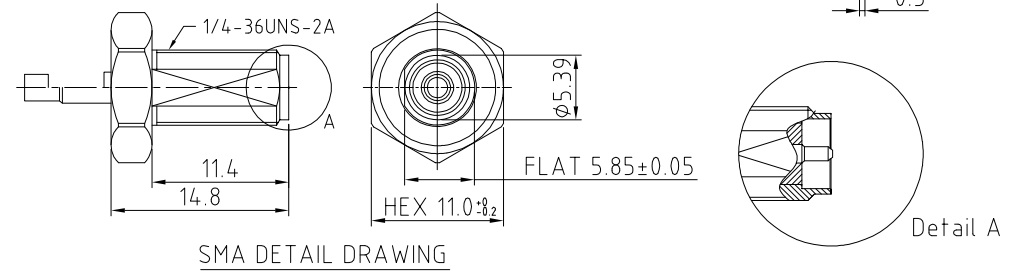
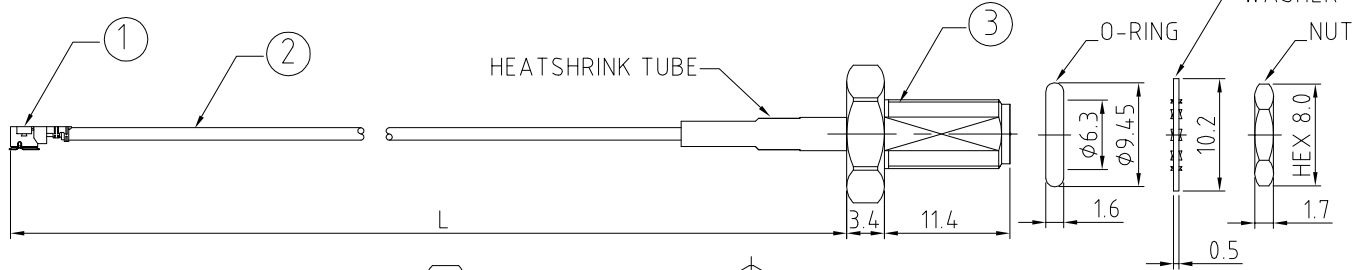
USAGE PRECAUTIONS: CABLES USING 'MICRO' COAX ARE DELICATE:
 (i) HANDLE WITH CARE.
 (ii) DO NOT TWIST; APPLY EXCESSIVE FORCES OR SHARP BENDS TO THE CABLE. DO NOT FORCEFULLY DEFORM WIRES.
 (iii) CONSULT CONNECTOR MANUFACTURER'S DATASHEETS FOR DETAILED NOTES ON HANDLING INSTRUCTIONS.

ENVIRONMENTAL:

- A. BULKHEAD MOUNTED CONNECTOR (RFCT-SMA008-F78) TESTED TO THE FOLLOWING SPECIFICATION:
- i. IP6X - DUST TIGHT - NO PARTICLE INGRESS.
 - ii. IPX7 WATERPROOF FOR 30 MINUTES UP TO 1M UNDERWATER.
 - iii. IPX8 WATERPROOF FOR 48 HOURS AT 1M UNDERWATER.
 - iv. IPX8 WATERPROOF FOR 12 HOURS AT 5M UNDERWATER.
 - v. PRESSURE TEST - 1 BAR FOR 10 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 GRAD CONN IF THE ORIENTATION YOU REQUIRE IS NOT SHOWN.
4. WORKING FREQUENCY RANGE: DC-3GHz.
5. OPERATING TEMPERATURE: $-40^{\circ}\text{C} \sim +90^{\circ}\text{C}$
6. IMPEDANCE: 50 OHM.



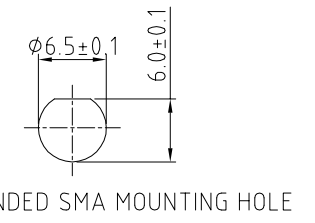
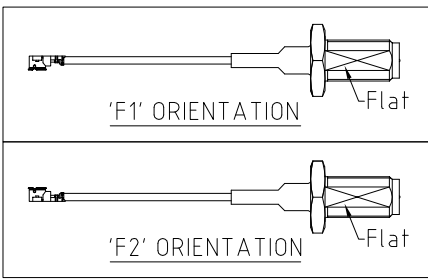
HOW TO ORDER
 CABLE 138 RF - X X X - X X - X - X

"L" LENGTH IN MM:
 eg: 100MM = 100
 (MIN. 025-MAX.400)
 STANDARD = 100, 150, 200)
 Tolerance: $\lt; 50\text{mm} : \pm 2\text{mm}$
 51-200mm: $\pm 5\text{mm}</math>
 201-400mm: $\pm 7\text{mm}</math>$$

CABLE SIZE OPTIONS:
 0 = $\phi 1.13\text{MM}$ CABLE, COLOR: GRAY.
 1 = $\phi 1.13\text{MM}$ LOW LOSS CABLE, COLOR: GRAY.
 2 = $\phi 1.37\text{MM}$ CABLE, COLOR: BLACK.
 3 = RG178 CABLE, COLOR: BROWN.
 4 = $\phi 1.32\text{MM}$ DS CABLE, COLOR: GRAY.

WASHER AND NUT OPTIONS:
 BLANK = SEPARATELY PACKED (STANDARD)
 A = ASSEMBLED WITH CONNECTOR

ORIENTATION OPTIONS:
 BLANK = DOES NOT HAVE A FIXED ORIENTATION
 F1 = MHF CONNECTION DOWN (L=25-100MM)
 F2 = MHF CONNECTION UP (L=25-100MM)
 (SEE NOTES 1, 2, 3 AND DIAGRAMS FOR MORE INFORMATION)



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| REV. DATE & DRN |
| 10 09/07/12 - NYW RELEASE |
| 11 05/02/13 - NYW ADD NOTE 4. |
| 12 06/18/13 - NYW AMEND SMA P/N |
| 13 06/11/13 - NYW AMEND FREQUENCY TO 3GHZ. |
| 14 23/07/15 - NYW UPDATE SMA PART NUMBER |
| 15 30/07/15 - RJH ADD MOUNTING INFO. |
| 16 02/06/16 - NYW ADD 138 CABLE OPTION. |
| 17 30/09/16 - RJH ADD 137 CABLE OPTION. |
| 18 19/05/17 - NYW ADD RG178 CABLE OPTION. |
| 19 05/06/17 - NYW ADD OPERATING TEMP. |
| 20 05/11/21 - NYW ADD CABLE SIZE OPTION 4. |
| ADD NOTE 6. |

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| Scale: NTS | THIRD ANGLE | Unstated: X, XX, XXX ANGLES | Tolerances: N/A, N/A, N/A |
| Drawn: RJH | | | |
| App'd: XXX | Title: CABLE ASSEMBLY | | |
| Date: 5 NOV. '21 | Revision: 2.0 | Unit: mm | |

IP67/68 Rated Cables www.gradconn.com

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| Type: Cable 138 RF |
| CABLE 138 RF |
| Drawing Number: |
| Sheet 1 of 1 |
| Drawing © E and O E |