



### High Precision VNA Microwave / RF Cables



#### Features

- Precision microwave cable assembly capable of frequencies up to 67GHz with excellent VSWR, low insertion loss, phase and amplitude stability.
- These cable assemblies include NMD connectors providing solid light weight construction which can mate directly with VNA ports.
- The cable assemblies deliver reliable and repeatable test results when subject to bending, crushing and other rigorous test conditions.

#### Electrical Specifications, $T_A=25^\circ\text{C}$

| Parameters                 | Min.                         | Typ. | Max.       | Units            |
|----------------------------|------------------------------|------|------------|------------------|
| Frequency Range            | DC                           |      | 18         | GHz              |
| Insertion Loss             |                              |      | 2.10       | dB               |
| VSWR                       |                              |      | 1.20       | :1               |
| Amplitude Stability        |                              |      | $\pm 0.05$ | dB               |
| Phase Stability            |                              |      | $\pm 2.0$  | degrees          |
| Maximum Outer Diameter     | 15.2                         |      |            | mm               |
| Minimum Bend Radius        | 50                           |      |            | mm               |
| Mating Cycles              | >2000                        |      |            |                  |
| Recommended Torque         | 1.35 / 1.35-2                |      |            | Nm               |
| Operating Temperature      | 0 to +40                     |      |            | $^\circ\text{C}$ |
| Weight                     |                              |      |            | ounces           |
| Impedance                  | 50                           |      |            | $\Omega$         |
| Input / Output Connectors  | N-male/NMD 3.5mm-male        |      |            |                  |
| Connector Body             | stainless steel, passivated  |      |            |                  |
| Connector Center Conductor | gold-plated beryllium copper |      |            |                  |
| Outer Jacket               | multilayer armour            |      |            |                  |

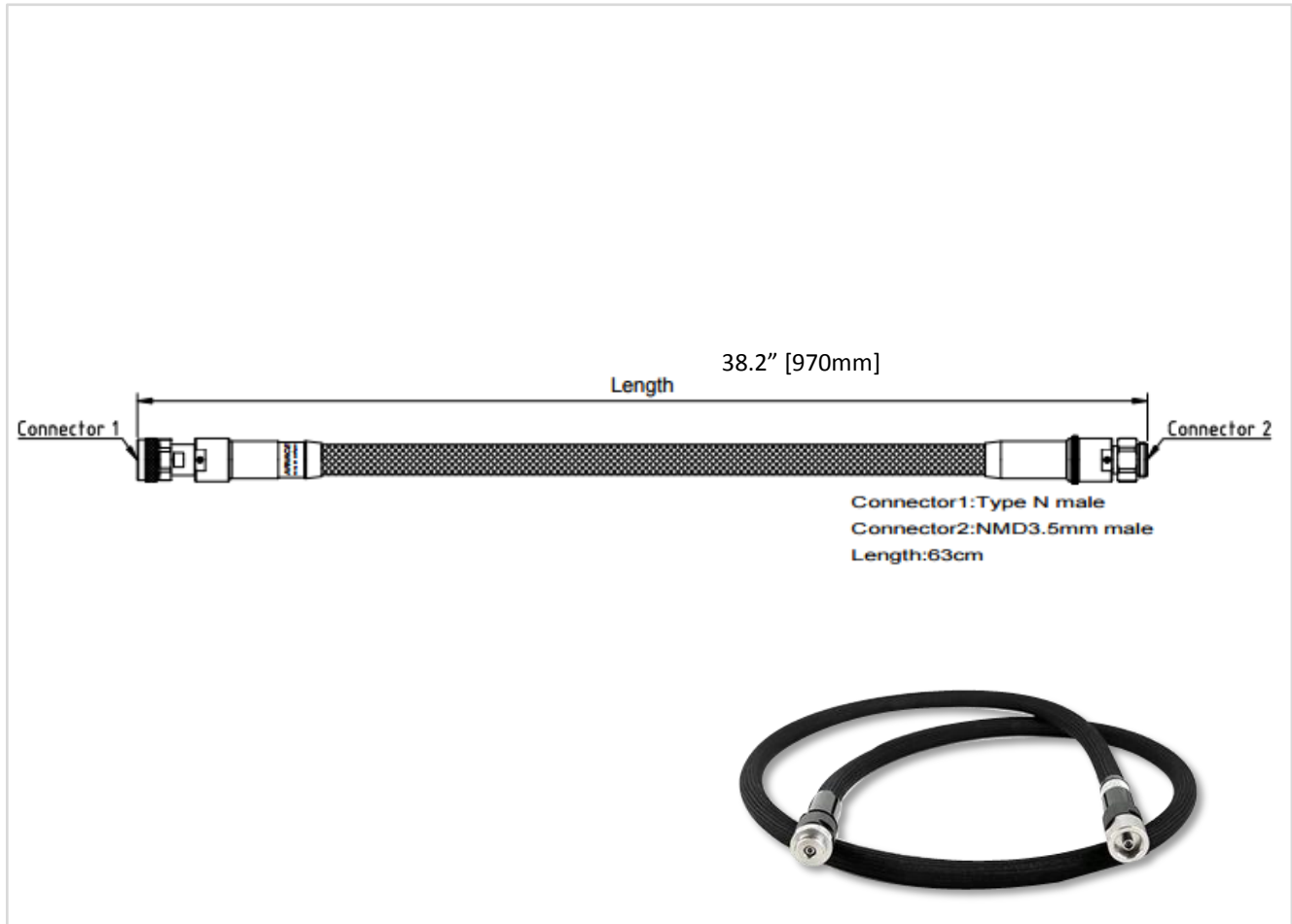
#### Environmental Specifications

|                         |                                                                               |
|-------------------------|-------------------------------------------------------------------------------|
| Operational Temperature | 0 to +40 $^\circ\text{C}$                                                     |
| Storage Temperature     | -40 to +75 $^\circ\text{C}$                                                   |
| Altitude                | 30,000 ft. (Epoxy Seal Controlled environment)                                |
|                         | 60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional) |
| Vibration               | 25g RMS (15 degrees 2KHz) endurance, 1 hour per axis                          |
| Humidity                | 100% RH at 35 $^\circ\text{C}$ , 95%RH at 40 $^\circ\text{C}$                 |
| Shock                   | 20G for 11msc half sine wave, 3 axis both directions                          |
| Compression Resistance  | >920kgf/cm                                                                    |



## Outline Drawing:

All Dimensions in inches [mm]



### Important Notice

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