

# PRODUCT SPECIFICATION

## 50 Ohm Coaxial Feeder Cable

### RF50Z 7/8"(3A0116 D03)

#### PRODUCT DESCRIPTION



- The high-performance of attenuation allows coaxial cable to be used in different RF systems, such as 3G, 4G mobile communication.
- Wide range of applications, such as indoor distribution, broadcast, various base stations, wireless cellular, and others.
- Lower VSWR, perfect shielding effectiveness, and extraordinary inter-modulation performance lead to fewer energy loss and outer interference.

#### CONSTRUCTION

|                 |                                       |           |
|-----------------|---------------------------------------|-----------|
| Inner conductor | Copper tube                           | Φ 8.85mm  |
| Insulation      | Physically foamed PE                  | Φ 22.50mm |
| Outer conductor | Ring corrugated copper                | Φ 24.90mm |
| Jacket          | Fire retardant low smoke zero halogen | Φ 27.10mm |

#### MECHANICAL PROPERTIES

|                                   |    |      |
|-----------------------------------|----|------|
| Min. single bending radius        | mm | 120  |
| Min. repeated bending radius      | mm | 250  |
| Max. tensile force                | N  | 1470 |
| Recommended maximum clamp spacing | m  | 1    |

#### ELECTRICAL PROPERTIES

|                       |       |       |
|-----------------------|-------|-------|
| Impedance             | Ω     | 50±2  |
| Nominal capacitance   | pF/m  | 75    |
| Nominal inductance    | μH/m  | 0.19  |
| Propagation velocity  | %     | 86    |
| DC breakdown voltage  | kV    | 6     |
| Insulation resistance | MΩ•km | >5000 |
| Peak power rating     | kW    | 91    |
| Cut-off frequency     | GHz   | 5.5   |
| Screening attenuation | dB    | >120  |

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#### TRANSMISSION PROPERTIES

| Frequency<br>MHz | Attenuation<br>@20°C, dB/100m(dB/100ft) | Power<br>@40°C, kW |
|------------------|---|--------------------|
| 100              | 1.19(0.36)                              | 7.56               |
| 450              | 2.65(0.81)                              | 3.41               |
| 690              | 3.35(1.02)                              | 2.85               |
| 800              | 3.63(1.11)                              | 2.48               |
| 900              | 3.88(1.18)                              | 2.33               |
| 1000             | 4.12(1.26)                              | 2.19               |
| 1800             | 5.75(1.75)                              | 1.57               |
| 2000             | 6.11(1.86)                              | 1.48               |
| 2200             | 6.45(1.97)                              | 1.41               |
| 2400             | 6.79(2.07)                              | 1.34               |
| 2500             | 6.95(2.12)                              | 1.30               |
| 2600             | 7.12(2.17)                              | 1.27               |
| 2700             | 7.28(2.22)                              | 1.25               |
| 3000             | 7.76(2.37)                              | 1.16               |

Attenuation values may be with a tolerance of 5%.

#### VSWR

|              |      |
|--------------|------|
| 380-470MHz   | 1.12 |
| 800~1000MHz  | 1.12 |
| 1700~2200MHz | 1.12 |
| 2300~2400MHz | 1.12 |
| 2500~2700MHz | 1.15 |

#### ENVIRONMENTAL PROPERTIES

|                 |           |
|-----------------|-----------|
| IEC 60332-3-24  | Compliant |
| IEC 60332-1-2   | Compliant |
| IEC 60754       | Compliant |
| IEC 61034-2     | Compliant |
| 2011/65EU(ROHS) | Compliant |