

PRODUCT SPECIFICATION

50 Ohm Coaxial Feeder Cable

RF50Z 1/4" S

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 Clad Aluminum | Φ 1.90mm |
| Insulation | Physically foamed PE | Φ 4.70mm |
| Outer conductor | Helical corrugated copper | Φ 6.40mm |
| Jacket | Flame retardant black PE | Φ 7.40mm |

MECHANICAL PROPERTIES

| | | |
|-----------------------------------|----|-----|
| Min. single bending radius | mm | 25 |
| Min. repeated bending radius | mm | 30 |
| Max. tensile force | N | 680 |
| Recommended maximum clamp spacing | m | 1 |

ELECTRICAL PROPERTIES

| | | |
|-----------------------|-------------|-------|
| Impedance | Ω | 50±1 |
| Nominal capacitance | pF/m | 79.4 |
| Nominal inductance | μH/m | 0.20 |
| Propagation velocity | % | 82 |
| DC breakdown voltage | kV | 1.6 |
| Insulation resistance | MΩ•km | >5000 |
| Peak power rating | kW | 6 |
| Cut-off frequency | GHz | 20 |
| Screening attenuation | dB | >120 |
| PIM | dBc@(2×20W) | ≤-160 |

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TRANSMISSION PROPERTIES

| Frequency | Attenuation | Power |
|-----------|--------------------------|-----------|
| MHz | @20°C, dB/100m(dB/100ft) | @20°C, kW |
| 100 | 5.89(1.80) | 1.23 |
| 450 | 12.80(3.90) | 0.57 |
| 690 | 16.07(4.90) | 0.48 |
| 800 | 17.40(5.30) | 0.42 |
| 900 | 18.40(5.61) | 0.40 |
| 1000 | 19.60(5.98) | 0.37 |
| 1800 | 26.90(8.20) | 0.27 |
| 2000 | 28.50(8.69) | 0.26 |
| 2200 | 29.98(9.14) | 0.24 |
| 2400 | 31.43(9.58) | 0.23 |
| 2500 | 32.15(9.80) | 0.22 |
| 2600 | 32.86(10.02) | 0.22 |
| 2700 | 33.56(10.23) | 0.21 |
| 3000 | 35.60(10.85) | 0.20 |

Attenuation values may be with a tolerance of 5%.

VSWR

| | | |
|--------------|---|------|
| 690-960MHz | ≤ | 1.12 |
| 1700-2200MHz | ≤ | 1.12 |
| 2300-2400MHz | ≤ | 1.12 |
| 2500-2690MHz | ≤ | 1.15 |

ENVIRONMENTAL PROPERTIES

| | |
|-----------------|----------------------------------|
| Flame retardant | IEC 60332-1, IEC60332-3C, UL CMR |
| 2011/65EU(ROHS) | Compliant |

Note: According to customers' requirements, the flame retardant of cable can meet one or all of the standard of IEC 60332-1, IEC60332-3C, UL CMR.