

## Economical Low Loss Coaxial Cable, RCM500S DC-8GHz, Ø12.7mm, E-Grade, Super Soft



Dimensions(mm) Tolerance±1%



### Electrical & Environmental

|                       |                        |
|-----------------------|------------------------|
| Frequency Range       | DC-8GHz                |
| Impedance             | 50 Ohms                |
| CW power@25°C         | 168W @8GHz, 298W @3GHz |
| Attenuation@Length 1m | 0.42 dB Max @8GHz      |
| Capacitance           | 77 pF/m                |
| VOP                   | 86%                    |
| SE                    | 90dB Min               |
| Voltage               | 3000V@DC               |
| OT                    | -40~+85°C              |

### Product Information

|                     |                                   |
|---------------------|-----------------------------------|
| Product Number      | RCM500S, E-Grade                  |
| Product Type        | Economical Low Loss Coaxial Cable |
| Bend Radius (Inst.) | 31.80mm                           |
| Bend Radius (Rep.)  | 127.00mm                          |
| Net Weight          | About 140.0g per meter            |

### RFTOP P/N and Packaging

| RFTOP P/N   | Length | Packaging  |
|-------------|--------|------------|
| RCM500S-10M | 10 m   | Sealed bag |

### RCM500S Structure Characteristics

| Structure                                                                                  | Material                            | Diameter     |
|--------------------------------------------------------------------------------------------|-------------------------------------|--------------|
| 1.Center Conductor                                                                         | Stranded Bare Copper Wire           | 3.61 mm      |
| 2.Dielectric                                                                               | Foam PE                             | 9.40 mm      |
| 3.Inner shield                                                                             | Aluminum Foil Longitudinal Wrapping | mm           |
| 4.Outer Shield                                                                             | Tin-plated Copper Wire Braiding     | 10.29 mm     |
| 5.Jacket                                                                                   | Black TPE                           | 12.70 mm     |
| Frequency(MHz)                                                                             | ATTEN(dB/100M)                      | Avg Power(W) |
| 50                                                                                         | 2.73                                | 2606         |
| 100                                                                                        | 3.90                                | 1828         |
| 200                                                                                        | 5.57                                | 1278         |
| 500                                                                                        | 9.00                                | 791          |
| 800                                                                                        | 11.56                               | 616          |
| 1000                                                                                       | 13.04                               | 546          |
| 2000                                                                                       | 19.05                               | 374          |
| 2450                                                                                       | 21.33                               | 334          |
| 3000                                                                                       | 23.91                               | 298          |
| 4000                                                                                       | 28.17                               | 253          |
| 5000                                                                                       | 32.05                               | 222          |
| 6000                                                                                       | 35.66                               | 200          |
| $\text{dB}/100\text{M}=\text{K1} \times \sqrt{\text{FMHz}} + \text{K2} \times \text{FMHz}$ |                                     |              |
| $\text{K1}=0.379, \text{K2}=0.00105, \text{P3}=7120$                                       |                                     |              |