

## CABLE COMPONENTS

RF PRODUCT DATASHEET

PRODUCT ID: 0171-0000

### 7/8" LOW LOSS CABLE

RF Cable Coax, 7/8", Low Loss – Aluminium Outer Conductor



#### CONSTRUCTION MATERIALS

- |                    |                                   |
|--------------------|-----------------------------------|
| ▪ Inner Conductor: | Copper-Clad Aluminium Wire        |
| ▪ Dielectric:      | Physical Foam Polyethylene        |
| ▪ Outer Conductor: | Helical corrugated aluminium tube |
| ▪ Jacket:          | LLDPE or fire-retardant PE        |

#### PHYSICAL DIMENSIONS

- |                             |          |
|-----------------------------|----------|
| ▪ Inner Conductor Diameter: | 3.60 mm  |
| ▪ Dielectric Diameter:      | 8.70 mm  |
| ▪ Outer Conductor Diameter: | 12.00 mm |
| ▪ Diameter Over Jacket:     | 13.30 mm |

#### MECHANICAL DATA

##### *Minimum Bending Radius:*

- |                            |               |
|----------------------------|---------------|
| ▪ Single Bending:          | 3.60 mm       |
| ▪ Repeated Bending:        | 8.70 mm       |
| ▪ Minimum Number of Bends: | 15            |
| ▪ Tensile Strength:        | 650 N(143 lb) |

#### ENVIRONMENTAL SPECIFICATION

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|-----------------------------|-----------------|
| ▪ Storage Temperature:      | -55 °C ~ +85 °C |
| ▪ Installation Temperature: | -40 °C ~ +60 °C |
| ▪ Operating Temperature:    | -55 °C ~ +85 °C |

#### ELECTRICAL DATA

- |                                  |                       |
|----------------------------------|-----------------------|
| ▪ Capacitance:                   | 80.0 pF/m(24.4 pF/ft) |
| ▪ Impedance:                     | 50±1 Ω                |
| ▪ Velocity:                      | 83%                   |
| ▪ RF Peak Voltage:               | 1.13 kV               |
| ▪ Peak Power Rating:             | 19 kW                 |
| ▪ Cut-off Frequency:             | 12.5 GHz              |
| ▪ Shielding Effectiveness >10MHz | >120 dB               |
| ▪ Insulation Resistance:         | 5000 MΩ•km            |
| ▪ VSWR:                          | 0.8~1.0 GHz – ≤1.10   |
|                                  | 1.7~2.2 GHz – ≤1.13   |
|                                  | 2.2~2.7 GHz – ≤1.15   |