

Technical Data Sheet

Coaxial Cable 50 Ω - PTFE - Handformable Microwave Cable

RSF-141



Material And Diameter

| Connector parts | Material | Diameter |
|-----------------|------------------------------------|---------------------|
| Inner Conductor | Steel, Copper+Silver plated (SPCW) | 0.92 mm [0.0362 in] |
| Dielectric | PTFE (Polytetrafluoroethylene) | - |
| Outer Shield | Copper, Tin plated | 3.58 mm [0.1409 in] |

Electrical Data

Impedance $50 \Omega \pm 2$ DC to 26.5 GHz Frequency Capacitance $95.2 \, \mathrm{pF/m}$ Velocity of signal propagation 70 % Signal delay 4.7 ns/m Insulation resistance $\geq 1 \times 10^8 M\Omega/m$ ≥ 100 dB (up to 18 GHz) Screening effectiveness ≤ 1.9 kVrms (@ sea level) Operating voltage

Mechanical Data

Weight 43 g/m Min. bending radius 9.53 mm

Environmental Data

Temperature range $-40\,^{\circ}\text{C}$ to $+120\,^{\circ}\text{C}$ Installation temperature $-20\,^{\circ}\text{C}$ to $+60\,^{\circ}\text{C}$ RoHS (2011/65/EU) compliant

Typical Attenuation

| Frequency (GHz) | Typical Attenuation (dB/m) @ 25°C sea level | Typical Attenuation (dB/ft) @ 25°C sea level | Max. CW power (Watt) @ 40°C sea level |
|-----------------|--|---|--|
| 0.5 | 0.30 | 0.09 | 491.7 |
| 1 | 0.46 | 0.14 | 343.2 |
| 5 | 1.12 | 0.34 | 145.5 |
| 10 | 1.64 | 0.50 | 99.1 |
| 18 | 2.33 | 0.71 | 70.8 |
| 26.5 | 2.95 | 0.90 | 56.4 |

| The facts and figures herein are carefully compiled to the best of ou | Jr |
|--|----|
| knowledge, but they are intended for general informational purposes only | y. |
| In the effort to improve our products, we reserve the right to make change | es |
| judged to be necessary. | |

| ur | Rev.:- | Rosnol RF/Microwave Technology | Page |
|----|----------|---|------|
| у. | | <u>www.rosnol.com</u> ; info@rosnol.com | |
| es | | Phone: +886-3-463-5095 / Fax: +886-3-463-5952 | 1/1 |
| | 19/11/10 | N-CAGE Code: SFKKO / ISO9001 certified | ., |