

# Datasheet

## RG142 Coaxial Cable

### Construction



Cable Marking: RG142 FEP

| Item            | Material                              | Diameter (mm) |
|-----------------|---------------------------------------|---------------|
| Inner Conductor | Silver Plated Copper Clad Steel       | 0.94 ± 0.0254 |
| Dielectric      | PTFE(Nature)                          | 2.95 ± 0.15   |
| First Shield    | Silver Plated Copper Braid(16/7/0.12) | 95% ± 5%      |
| Second Shield   | Silver Plated Copper Braid(16/7/0.12) | 95% ± 5%      |
| Jacket          | FEP(Brown)                            | 4.95 ± 0.15   |

### Electrical Characteristics

|                                  |            |
|----------------------------------|------------|
| Capacitance (pF/m)               | 96.5       |
| Impedance (Ω)                    | 50 ± 2     |
| Velocity of Propagation (%)      | 69.5       |
| Conductor DCR (Ohm/km)           | 63.3       |
| Outer Shield DCR (Ohm/km)        | 7.5        |
| Max Operating Frequency (GHz)    | 12.4       |
| Max Operating Voltage (RMS)      | 1900.0     |
| Corona Extinction voltage (VRMS) | 1900.0     |
| Voltage Withstand (VRMS)         | 5000.0     |
| Spark Test (VRMS,Min)            | 2000.0     |
| Operating Temp Range (°C)        | -55 to 200 |

### Attenuation ( @ 20 °C)

| Frequency | Attenuation | Attenuation |
|-----------|-------------|-------------|
| 10        | 1.1         | 3.6         |
| 50        | 2.6         | 8.5         |
| 100       | 3.8         | 12.5        |
| 400       | 7.9         | 25.9        |
| 900       | 12.3        | 40.4        |
| 1000      | 13.1        | 43.0        |
| 3000      | 24.2        | 79.4        |
| 5000      | 32.6        | 107.0       |
| 8000      | 50.8        | 166.7       |
| 12400     | 80.4        | 263.8       |