

# MIL-C-17F Coaxial Cables

## M17/60-RG142 (RG 142 B/U)

### Construction

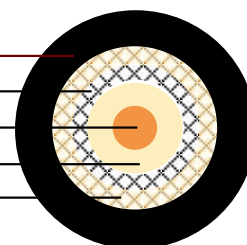
Inner conductor	Silver plated copper clad steel(SCCS)	Φ0.94 mm
Dielectric	Solid PTFE	Φ2.95 ± 0.05mm
Outer conductor(shield 1)	Silver plated copper	112 x 0.13 mm
Shield coverage		96%
Outer conductor(shield 2)	Silver plated copper	112 x 0.13 mm
Shield coverage		96%
Outer sheath	FEP	Φ4.95 mm

### Electrical & Mechanical Characteristics

Impedance	50±3 Ohm
Nominal capacitance	95.4 pF/m
Velocity of propagation	70%
Insulation resistance	>2000 Mohm.Km
Inner conductor resistance	63.3 Ohm/Km
Outer conductor resistance	7.5 Ohm/Km
Test/Operatig Voltage(max)	5.0 KV/1.9 KV
Operating temperature range	-55 °C - +200 °C
Copper Weight	47.0 Kg/Km
Cable weight (approx.)	80.0 Kg/Km
Screening effectiveness	100-900 MHz >60dB



FEP sheath  
Silver copper shield1  
Silver copper inner conductor  
Solid PTFE dielectric  
Silver copper shield 2



### Attenuation

Frequency (MHz)	Attenuation (dB/100 m)	Attenuation (dB/100ft)
100	12.8	3.90
200	17.7	5.40
400	25.9	7.90
700	35.1	10.70
900	40.4	12.32
1000	43.0	13.11
2000	63.3	19.30
3000	79.4	24.21
5000	107.0	32.62
8000	141.7	43.20

### Return Loss

30-300 MHz	>28dB
300-600 MHz	>24dB
600-900 MHz	>22dB