



DESCRIPTION: RG-179
 IMPED 75 OHMS
 MAX. OD: 0.105 INCHES
 MAX. OPERATING FREQ.: 3 GHz.
 CUT OFF FREQ.: 70.6 GHz.
 MIL SPEC: M17/94-RG179

ITEM	MATERIAL	SIZE
A. CENTER CONDUCTOR	SILVER PLATED STRANDED COPPER WELD STEEL WIRE	0.012
B. DIELECTRIC:	SOLID PTFE	0.063
C. OUTER BRAID:	SILVER PLATED COPPER WIRE	0.079
D. JACKET:	BROWN TINT FEP	0.100

MECHANICAL CHARACTERISTICS:

OUTER CONDUCTOR INTEGRITY: 15 POUNDS MINIMUM AXIAL PULL
 MINIMUM BEND RADIUS (ONE TIME): 0.60 INCHES FIXED INSTALLATION
 PREFERRED BEND RADIUS: 2.00 INCHES
 TEMPERATURE RANGE: -55 / +150 DEGREES CELSIUS
 WEIGHT MAXIMUM: 0.011 POUNDS PER FOOT

ELECTRICAL CHARACTERISTICS:

CENTER CONDUCTOR DC RESISTANCE 24 OHMS / 100 FEET NOMINAL
 OUTER CONDUCTOR DC RESISTANCE 0.8 OHMS / 100 FEET NOMINAL
 NOMINAL IMPEDANCE: 75 OHMS
 NOMINAL CAPACITANCE: 19.2 pf / FT.
 NOMINAL INDUCTANCE: 0.108 uh / FT
 NOMINAL VELOCITY OF PROPAGATION: 70.7 %
 NOMINAL DELAY: 1.44 nS / FT.
 MAXIMUM OPERATING VOLTAGE: 1246 VRMS
 MAXIMUM CW POWER RATING: 56 WATTS AT 3 GHz
 MAXIMUM RETURN LOSS: -17 dB AT 3 GHz
 MAXIMUM INSERTION LOSS: 60.7 dB / 100 FT AT 3 GHz
 NOMINAL INSERTION LOSS: 56.7 dB / 100 FT AT 3 GHz
 To calculate maximum insertion loss at any frequency use the formula below:

$$32 \text{ times square root of freq.} + 1.750 \text{ times freq.} + 0 = \text{dB}/100'$$
 RELATIVE SHIELDING: -40 dB SINGLE SHIELDED

FEATURES:

