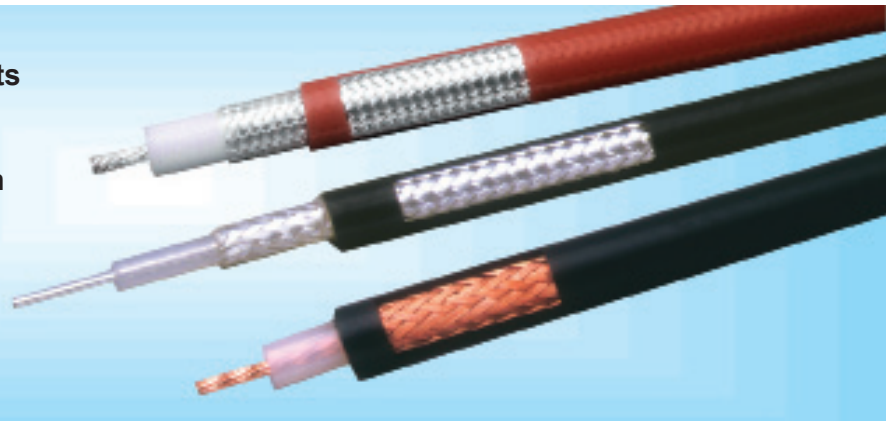
M17/RG

'Select' Types and Sizes

- *Low Loss HF-UHF Interconnect*
- *Wireless Base Station Interconnect*
- *Tactical Field Antenna Feeders*

Features & Benefits

- **Meets all MIL-C-17 Requirements**
- **Good Shielding Effectiveness**
- **Low Passive Intermod (PIM)**
- **Readily available in Distribution**
- **Uses Standard Connectors**



Attenuation (Loss) – not the best by today's standards but is still acceptable for many applications.

Attenuation Stability – silver plated outer conductor prevents oxidation of the conductors thereby minimizing attenuation change vs time. Conversely, bare copper outer conductors may oxidize quite rapidly precipitating loss increase which is only significant at frequencies > 500 MHz.

Power Handling – solid dielectric materials (high thermal conductivity) provides excellent power handling capability.

Temperature Range - broad operating temperature range.

Mechanical Properties – solid dielectric provides superior crush resistance and therefore is well suited for tactical applications.

M17/RG's are traditional MIL Spec coax cables that were born 50-60 years ago. Originally created to support WWII military applications, these cables quickly became the products of choice for commercial wireless applications once they hit the surplus market, and continue to be used today.

M17/RG's have been widely adopted for commercial and military applications. Their QPL stature insures a high quality product made to the same spec regardless of the manufacturer.

Some of the key characteristics of M17/RG's are:

Shielding Effectiveness – in the 40 to 60 dB range and is acceptable for many lower frequency applications.

Phase Stable – not the best for phase stability by today's standards but can be optimized by appropriate preconditioning over the temp range of interest.

Low Passive Intermod (silver plated types)

M17 Part	M17 QPL No.	TMS Part	Conductor inches No.	Dielectric inches (mm)	Shields inches (mm)	Jacket inches (mm)	Armor inches (mm)	Weight lb/ft (mm)	Impedance Ohms (kg/m)	Capacitance pF/it p (%)	Max Oper. Voltage (pF/m)	Temp. Range vrms	M17 Test F (C)
M17/74-RG213	17-804-77	AA-3408	BC 7/.0296" 0.0888 (2.26)	PE 0.285 (7.24)	33BC 0.318 (8.08)	PVC-IIA 0.405 (10.29)	NA	0.111 (0.165)	50+/-2 66	30.8 (101.1)	5,000	-40 +185 (-40 +85)	0.05 - 1 GHz Swept
M17/75-RG214	17-804-77	AA-3409	SC 7/.0296" 0.0888 (2.26)	PE 0.285 (7.24)	34SC:34SC 0.343 (8.71)	PC-IIA 0.425 (10.80)	NA	0.130 (0.194)	50+/-2 66	30.8 (101.1)	5,000	-40 +185 (-40 +85)	0.05 - 11 GHz Swept
M17/84-RG223	17-303-83	AA-3413	SC 0.035 (0.89)	PE 0.116 (2.95)	36SC:36SC 0.162 (4.11)	PVC-IIA 0.212 (5.38)	NA	0.041 (0.061)	50+/-2 66	30.8 (101.1)	1,900	-40 +185 (-40+85)	.04 - 12.4 GHz Swept
M17/119-RG174	17-813-77	AA-3419	CCS 7/.0063" 0.0189 (0.48)	PE 0.060 (1.52)	38TC 0.078 (1.98)	PVC-IIA 0.110 (2.79)	NA	0.009 (0.013)	50+/-2 66	30.8 (101.1)	1,500	-40 +185 (-40 +85)	0.05 - 1 GHz Swept
M17/60-RG142	17-664-83	AA-3401	SCCS 0.037 (0.94)	PTFE 0.116 (2.95)	36SC.36SC 0.162 (4.11)	FEP-IX 0.195 (4.95)	NA	0.043 (0.064)	50+/-2 69.5	29.4 (96.5)	1,900	-67/+392 (-55 +200)	-.05 - 8 GHz Swept
M17/113-RG316	17-812-77	AA-3418	SCCS 7/.0067" 0.0201 (0.51)	PTFE 0.060 (1.52)	38SC 0.078 (1.98)	FEP-IX 0.098 (2.49)	NA	0.012 (0.018)	50+/-2 69.5	29.4 (96.5)	1,200	-67 +392 (-55 +200)	0.05 - 3 GHz Swept
M7/128-RG400	17-67-83	AA-3827	SC 19/.0080" 0.0384 (0.98)	PTFE 0.116 (2.95)	36SC:36SC 0.162 (4.11)	FEP-IX 0.195 (4.95)	NA	0.050 (0.074)	50+/-2 69.5	29.4 (96.5)	1,900	(67 +392) (-55 +200)	.05 - 12.4GHz Swept