

MIL-C-17 Attenuation and Power Handling

M17 Part Number	Zo (ohms)	Overall Diam. (in.)	DC Resist. (ohms/1000 ft)		M17 Max Freq. (MHz)	Loss Constants Resistive Dielectric		100 MHz Loss (dB/100)		400 MHz Loss (dB/100)		1000 MHz Loss (dB/100)		3000 MHz Loss (dB/100)		5000 MHz Loss (dB/100)		11000 MHz Loss (dB/100)		M17 Max Power (w) 400MHz
			Center	Outer		k1	k2	Typical	M17 (max)	Typical	M17 (max)	Typical	M17 (max)	Typical	M17 (max)	Typical	M17 (max)	Typical	M17 (max)	
M17/223-00002	50	0.475	1.39	1.65	2500	0.14387	0.00031	1.5	1.7	3.0	3.5	4.9	5.7	8.8	9.4	-	-	-	-	750
M17/224-00001	50	0.500	0.81	1.27	2500	0.11364	0.00031	1.2	1.4	2.4	2.8	3.9	4.6	7.1	7.6	-	-	-	-	987
M17/224-00002	50	0.570	0.81	1.27	2500	0.11364	0.00031	1.2	1.4	2.4	2.8	3.9	4.6	7.1	7.6	-	-	-	-	987
M17/225-00001	50	0.590	.524	1.20	2500	0.08888	0.00031	0.9	1.1	1.9	2.2	3.1	3.7	5.8	6.1	-	-	-	-	1219
M17/225-00002	50	0.665	.524	1.20	2500	0.08888	0.00031	0.9	1.1	1.9	2.2	3.1	3.7	5.8	6.1	-	-	-	-	1219
M17/226-00001	50	0.870	.541	0.55	2500	0.06091	0.00019	0.6	0.7	1.3	1.4	2.1	2.4	3.9	3.9	-	-	-	-	1979
M17/226-00002	50	0.945	.541	0.55	2500	0.06091	0.00019	0.6	0.7	1.3	1.4	2.1	2.4	3.9	3.9	-	-	-	-	1979
M17/227-00001	50	1.200	.323	0.37	2500	0.04396	0.00019	0.5	0.5	1.0	1.1	1.6	1.8	3.0	3.1	-	-	-	-	2768
M17/227-00002	50	1.300	.323	0.37	2500	0.04396	0.00019	0.5	0.5	1.0	1.1	1.6	1.8	3.0	3.1	-	-	-	-	2768
M17/228-00001	50	1.670	.209	0.27	2500	0.03113	0.00019	0.3	0.4	0.7	0.9	1.2	1.4	2.3	2.6	-	-	-	-	3950
M17/228-00002	50	1.770	.209	0.27	2500	0.03113	0.00019	0.3	0.4	0.7	0.9	1.2	1.4	2.3	2.6	-	-	-	-	3950

Notes:

- Attenuation (typical) at any Frequency = $k1 \times \text{SqRt}(\text{Fmhz}) + k2(\text{Fmhz})$
- BC shielded cables used up to 1 GHz maximum due to braid oxidation over time.
- TC shielded cables used up to 1 GHz maximum due to high loss of Tin Plating.
- SPC shielded cables may be used up to their Cutoff Frequency.
- Maximum Frequency listed in Table is as specified by MIL-C-17.
- Cutoff frequency may be higher than M17 max frequency.
- Power Data Given for 50 ohm Cables Only.
- Power Data for SPC/PTFE based on +250C center conductor.
- Power Data for PE dielectrics based on +80C center conductor.
- Power Data for foam PE dielectrics based on +100C center conductor.
- DC resistance of outer conductor includes all shield layers in parallel.
- Consult Factory for not listed.