

INCH-POUND

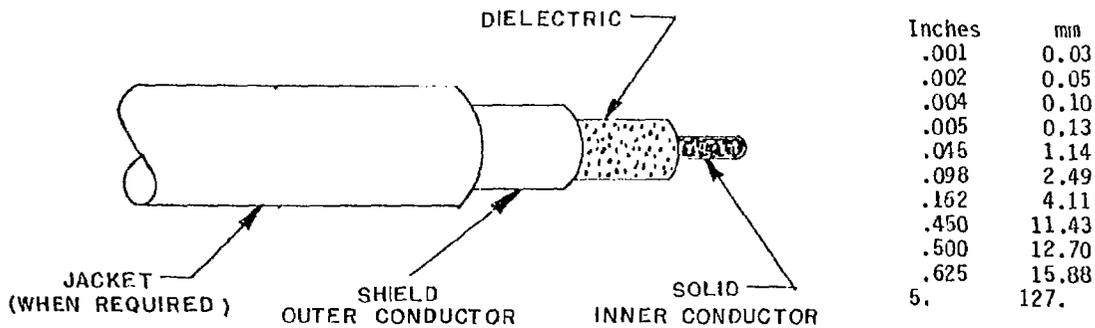
MIL-C-23806/1C
 20 February 1990
 SUPERSEDING
 MIL-C-23806/1B(FC)
 23 June 1969

MILITARY SPECIFICATION SHEET

CABLE, RADIO FREQUENCY, COAXIAL, SEMIRIGID, FOAM DIELECTRIC,
 1/2 INCH, 50 AND 75 OHM, (RG-231A/U, RG-331/U, RG-334/U AND RG-335/U)

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-C-23806.



Characteristics	50-ohm		75-ohm	
	Type I RG-231A/U	Type II RG-331/U	Type I RG-334/U	Type II RG-335/U
Constructional details				
	(Inch)	(Inch)	(Inch)	(Inch)
Inner conductor	0.162 ±0.002	0.162 ±0.002	0.098 ±0.001	0.098 ±0.001
Outer conductor				
Inside diameter	0.450 ±0.004	0.450 ±0.004	0.450 ±0.004	0.450 ±0.004
Outside diameter	0.500 ±0.005	0.500 ±0.005	0.500 ±0.005	0.500 ±0.005
Jacket				
Minimum wall thickness		0.045		0.045
Maximum outside diameter		.625		.625
Minimum bending radius	5	5		
Weight (pounds per 1000 ft. (approximate))	152	187	104	134

- NOTES:
1. Dimensions are in inches.
 2. Metric equivalents are for general information only.

FIGURE 1. Construction.

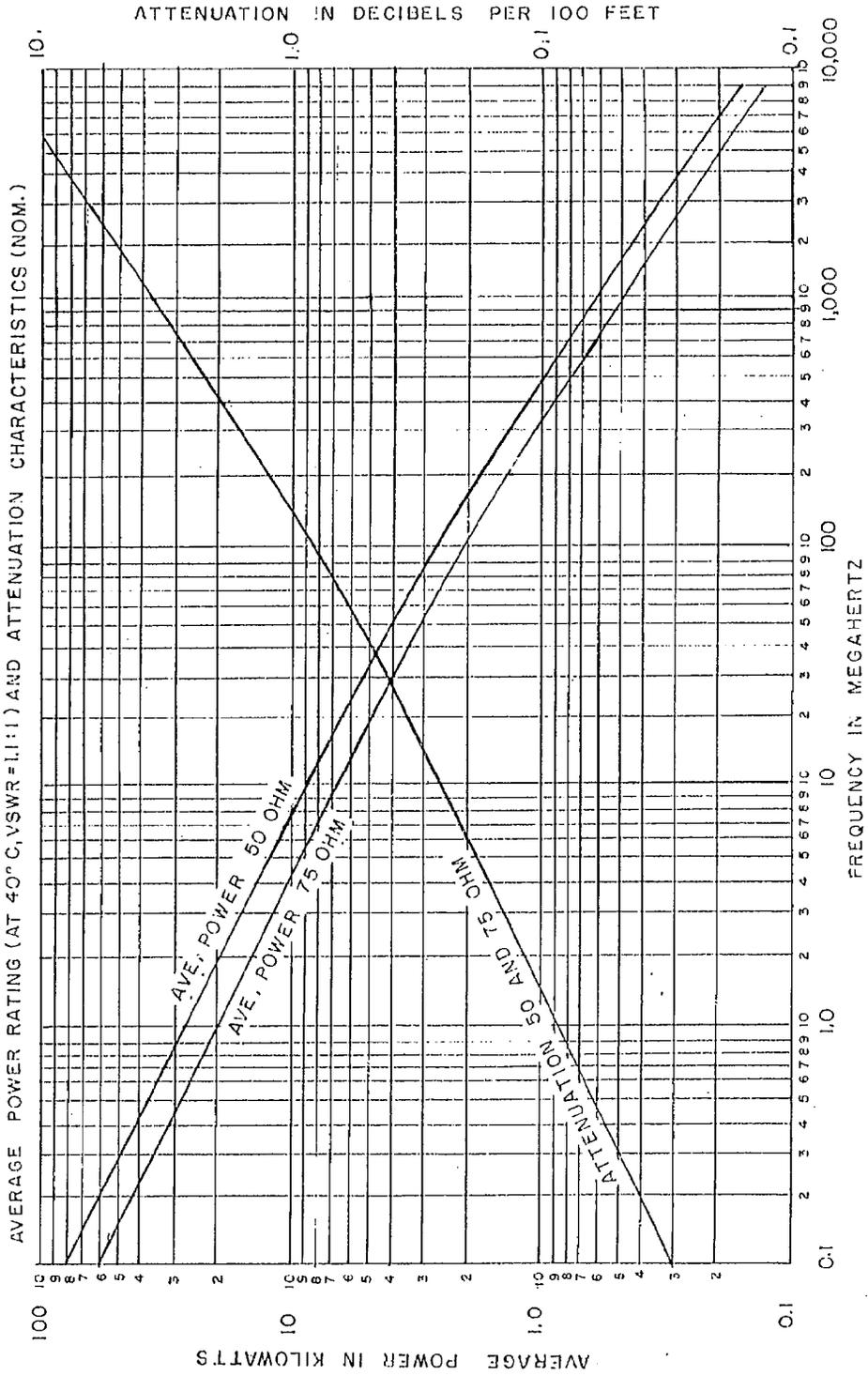


FIGURE 2. .500 inch foam dielectric coaxial cable (50 and 75 ohm).

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REQUIREMENTS:

	RG-231A/U RG-331/U	RG-334/U RG-335/U
Impedance (ohms)	50 ± 1	75 ± 2
Capacitance (nominal) (picofarads/ft)	25	17
Velocity of propagation (percent)	81 ± 2	81 ± 2
Dielectric strength (at 60 Hertz rms)	3.5 Kv.	4.3 Kv.
Dielectric constant (nominal)	1.5	1.5
Average power rating at operating frequency	See figure 2	See figure 2
Attenuation at operating frequency	See figure 2	See figure 2

Attenuation measurement at test frequencies of 30, 400, and 3,000 megahertz; maximum attenuation not to exceed 0.53, 2.19, and 7.0 db per 100 feet, respectively.

Voltage standing wave ratio: For each of the following frequency ranges, the VSWR shall not exceed the values at any specified frequency as measured in accordance with MIL-C-23806.

Frequency range (megahertz)	Initial	After temperature cycling	After cooling
500 to 2000	1.15	1.18	1.18
2000 to 5000	1.20	1.25	1.25
5000 to 10,000	1.30	1.35	1.35

Temperature cycling and bending test: Coiling mandrel shall be 15 inches in diameter.

CONCLUDING MATERIAL

Custodians:
Air Force - 85
Navy - EC

Review activities:
Air Force - 99
DLA - ES, IS

User activities:
Army - AR

Preparing activity:
Navy - EC

Agent:
DLA - ES

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