



DATA SHEET	2170007
RG 223 /U	valid from : 12. 06. 2008

Application

Coaxial cable for radio- and computer systems as well as the entire field of commercial radio-frequency technology and electronics. With the outer conductor, consisting of two braids, the cable is recommended for applications with particularly stringent screening requirements. Cable design and electrical properties of RG 223 /U according to **MIL-C 17 F**. Designation according to MIL-C 17 F : M 17/84 – RG 223. The cable is intended for static laying in dry and damp interiors and outdoor.

Design

Inner conductor	Solid tinned copper wire, $0.89 \pm 0.025 \text{ mm}\varnothing$ (0.64 mm^2)
Insulation	PE (polyethylene) $2.94 \pm 0.1 \text{ mm}\varnothing$
Outer conductor	two silvered copper braids, coverage each nom. 95 %
Sheath	PVC, wall thickness approx. 0.75 mm, black, UV resistant, flame retardant outer diameter approx. $5.4 \pm 0.1 \text{ mm}\varnothing$

Electrical properties at 20 °C

DC resistance inner conductor		max. Ω/km	29,4	
Insulation resistance		min. $\text{G}\Omega/\text{km}$	5	
Capacitance at	1 kHz	nom. nF/km	105	
Nominal velocity of propagation		%	66	
Impedance		Ω	50 ± 2	
Acc. to M 17/84				
Attenuation at	1 MHz	dB/100m	nom. 1,3	
	5 MHz	dB/100m	nom. 2,8	
	10 MHz	dB/100m	nom. 4	
	20 MHz	dB/100m	nom. 5,7	
	50 MHz	dB/100m	nom. 9	max. 15,74
	100 MHz	dB/100m	nom. 13	max. 18,70
	200 MHz	dB/100m	nom. 19	max. 28,87
	400 MHz	dB/100m	nom. 28	max. 39,37
	800 MHz	dB/100m	nom. 43	max. 55,77
	1 GHz	dB/100m	nom. 48	max. 68,99
	2 GHz	dB/100m	nom. 68	max. 101,71
	3 GHz	dB/100m		max. 131,23
	5 GHz	dB/100m		max. 180,44
12 GHz	dB/100m		max. 301,82	
		max. kV	1.9	
HF voltage, peak value (not for power purposes)				
Working voltage (nominal voltage)	50 Hz	U_{eff} kV	2,0	
Test voltage		U_{eff} kV	5	

Mechanical and thermal properties

Weight		approx. kg/km	59
Minimum bending radius	fixed installation	mm	27
	repeated bendings	mm	110
Permissible temperature range	fixed installation	°C	- 40 bis + 80
	moved	°C	- 10 bis + 80
Fire load		kWh/m	0.143
Flame propagation	flame retardant to IEC 60332-1-2		

RoHS directive This cable confirms to RoHS directive (2002/95/EG)

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