

Technical Document
RG223 /U 50ohm Coaxial Cable
PVC Black

webro

Part Number: 480030E-BLK

Description: RG223 /U 50ohm Coaxial Cable PVC
Black



Product Construction

Conductor Material	:	Silver Plated Copper
Conductor Stranding	:	Solid, 1/0.90mm
Dielectric Material	:	Solid Polyethylene (SPE)
Dielectric Diameter	:	2.95mm ± 0.10
Screening 1	:	Silver Plated Copper Wire Braid
Screening 1 Coverage	:	> 98% ± 2
Screening 2	:	Silver Plated Copper Wire Braid
Screening 2 Coverage	:	> 97% ± 3
Sheath Material	:	Polyvinyl Chloride (PVC)
Sheath Colour	:	Black



Mechanical Characteristics

Overall Diameter	:	5.4mm ± 0.10mm
Temperature Range	Fixed	-15°C to +70°C
	Flexing	-5°C to +70°C
Bend Radius	:	10 x Overall Diameter
Weight	:	62 kg/km

Electrical Characteristics

Inner Conductor DC Resistance	:	≤ 28.0 Ω/km @ 20°C
Outer Conductor DC Resistance	:	≤ 8.0 Ω/km @ 20°C
Impedance	:	50 Ω ± 2
Nominal Capacitance	:	100 pF/m ± 3
Velocity of Propagation	:	66%
Shielding Effectiveness 100-900MHz	:	> 78 dB

Attenuation @20°C

Frequency (MHz)	Attenuation (dB/100m)	Frequency (MHz)	Attenuation (dB/100m)	Frequency (MHz)	Attenuation (dB/100m)
5	≤ 2.6 dB	450	≤ 30.1 dB	1800	≤ 67.4 dB
10	≤ 3.8 dB	600	≤ 35.4 dB	2000	≤ 72.2 dB
30	≤ 7.1 dB	800	≤ 41.6 dB	2500	≤ 82.6 dB
50	≤ 9.2 dB	900	≤ 44.5 dB	3000	≤ 90.5 dB
150	≤ 16.6 dB	1000	≤ 47.4 dB	5200	≤ 126.3 dB
220	≤ 20.3 dB	1500	≤ 60.5 dB	5800	≤ 136.7 dB

Return Loss @ 20°C

Frequency (MHz)	Return Loss
30MHz - 450MHz	≥ 28 dB
450MHz - 1000MHz	≥ 25 dB
1000MHz - 2000MHz	≥ 24 dB
2000MHz - 3000MHz	≥ 23 dB
3000MHz - 4000MHz	≥ 22 dB
4000MHz - 5800MHz	≥ 21 dB

Certifications & Standards

Flame Retardancy	:	BS EN 60332-1-2
RoHS 3 Compliant	:	Yes
REACH Compliant	:	Yes
CE CPR Classification	:	Eca to EN 50575:2014+A1:2016

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