

Technical Document
 WF100 75ohm Coax
 Underground Green CAI Approved



Part Number: 590004E-GRN

Description: WF100 75ohm Coax Underground
 HDPE Green - CAI Approved



Product Construction

Conductor Material	:	Plain Annealed Copper
Conductor Stranding	:	Solid, 1/1.00mm
Dielectric Material	:	Foam Polyethylene (FPE)
Dielectric Diameter	:	4.60mm ± 0.10
Screening 1	:	Overall Plain Copper Foil
Screening 1 Coverage	:	> 100%
Screening 2	:	Plain Copper Wire Braid
Screening 2 Coverage	:	> 55% ± 3
Sheath Material	:	High Density Polyethylene (HDPE)
Sheath Colour	:	Green



Mechanical Characteristics

Overall Diameter	:	6.65mm ± 0.3mm
Temperature Range	Fixed	-15°C to +70°C
	Flexing	-5°C to +70°C
Bend Radius	:	10 x Overall Diameter
Weight	:	51 kg/km

Electrical Characteristics

Inner Conductor DC Resistance	:	≤ 26 Ω/km @ 20°C
Outer Conductor DC Resistance	:	≤ 15 Ω /km @ 20°C
Characteristic Impedance	:	75 Ω ± 3
Nominal Capacitance	:	54 pF/m ± 3
Velocity of Propagation	:	82%

Attenuation @20°C

Frequency (MHz)	Attenuation (per 100m)	Frequency (MHz)	Attenuation (per 100m)
5	≤ 1.6 dB	860	≤ 19.5 dB
50	≤ 4.6 dB	1000	≤ 21.5 dB
100	≤ 6.5 dB	1750	≤ 29.0 dB
200	≤ 9.5 dB	2150	≤ 32.5 dB
460	≤ 15.0 dB		

Return Loss @ 20°C

Frequency (MHz)	Return Loss
5MHz - 470MHz	≥ 23 dB
470MHz - 862MHz	≥ 20 dB
862MHz - 2150MHz	≥ 18 dB

Certifications & Standards

CAI Certification	:	CAI 0116F
Screening Class	:	BS EN 50117
Flame Retardancy	:	BS EN 60332-1-2
RoHS 3 Compliant	:	Yes
REACH Compliant	:	Yes
UKCA CPR Classification	:	Eca to BS EN 50575:2014+A1:2016



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