

Part Number: 590003E-BRN

Description: WF100 75ohm Coax Low Smoke &
Fume (LSF) Brown - CAI Approved



Product Construction

Conductor Material	:	Plain Annealed Copper
Conductor Stranding	:	Solid, 1/1.00mm
Dielectric Material	:	Foam Polyethylene (FPE)
Dielectric Diameter	:	4.60mm $\pm$ 0.10
Screening 1	:	Overall Plain Copper Foil
Screening 1 Coverage	:	> 100%
Screening 2	:	Plain Copper Wire Braid
Screening 2 Coverage	:	> 55% $\pm$ 3
Sheath Material	:	Low Smoke & Fume (LSF)
Sheath Colour	:	Brown



Mechanical Characteristics

Overall Diameter	:	6.65mm $\pm$ 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	:	$\leq 26 \Omega/\text{km}$ @ 20°C
Outer Conductor DC Resistance	:	$\leq 15 \Omega/\text{km}$ @ 20°C
Characteristic Impedance	:	75 $\Omega \pm 3$
Nominal Capacitance	:	54 pF/m $\pm$ 3
Velocity of Propagation	:	82%

Attenuation @20°C

Frequency (MHz)	Attenuation (per 100m)	Frequency (MHz)	Attenuation (per 100m)
5	$\leq 1.6 \text{ dB}$	860	$\leq 19.5 \text{ dB}$
50	$\leq 4.6 \text{ dB}$	1000	$\leq 21.5 \text{ dB}$
100	$\leq 6.5 \text{ dB}$	1750	$\leq 29.0 \text{ dB}$
200	$\leq 9.5 \text{ dB}$	2150	$\leq 32.5 \text{ dB}$
460	$\leq 15.0 \text{ dB}$		

Return Loss @ 20°C

Frequency (MHz)	Return Loss
5MHz - 470MHz	$\geq 23 \text{ dB}$
470MHz - 862MHz	$\geq 20 \text{ dB}$
862MHz - 2150MHz	$\geq 18 \text{ dB}$

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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