

Part Number: 590003F-YEL

Description: WF100 75ohm Coax Low Smoke & Fume (LSF) Yellow - 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	:	Yellow



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	:	Fca to BS EN 50575:2014+A1:2016

CEDIA[®]
MEMBER



Publication Date: 27/01/2023

Revision Number: 2.0

Written by: GB

Authorised by: GB

This technical document and its information and images are intended for guidance only. Due to technical improvements, manufacturing changes or commercial factors the product may vary, and we reserve the right without notice or liability to amend the product information.