

Part Number: 590001E- BLK

Description: WF100 75ohm Coax PVC Black - 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 | : | Polyvinyl Chloride (PVC) |
| Sheath Colour | : | Black |



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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