

TruLan Cat 6A F/FTP Duct Grade Technical Datasheet

Part No: C6GFFHD

Description: The Cat 6A cable has been tested to 650MHz making it the ideal choice for high

speed data networks across a home or building.







Construction

Conductor Bare Copper AWG 23(1)

Insulation Material Skin-Foam-Skin Polyethylene (FPE)

Number of Pairs 4
Pair Identification TIA 568

Individual Pair Screen Aluminium Polyester Foil, >100% Coverage

Drain Wire 24(1)AWG, Tinned Copper

Overall ScreenAluminium/Polyester Foil, >100% CoverageInner Sheath MaterialLow Smoke Halogen Free (LSHF), BlueOuter Sheath MaterialLow Density Polyethylene (LDPE)

Electrical Characteristics

Max. Conductor Resistance @ 20°C \leq 8.6 Ω/100m Max. Resistance Unbalanced \leq 2.0 %

Nominal Impedance $100 \pm 15 \Omega$ (1-100MHz), $100 \pm 20 \Omega$ (100-250MHz), $100 \pm 25 \Omega$ (250-500MHz),

Insulation Resistance5000MΩ/kmMutual Capacitance≤ 5.6nF/100mCapacitance Unbalanced to Earth≤ 330 pF/100mNVP68.5 %Max. Delay Skew≤ 45 nS/100m

Test Voltage

Physical Characteristics

Overall Diameter 10.4 ± 0.2 mm

Bend Radius Fixed $4 \times OD$, Flexing $8 \times OD$ Temperature Rating Fixed $-20 ^{\circ}C$ to $70 ^{\circ}C$, Flexing $-10 ^{\circ}C$ to $60 ^{\circ}C$

Weight 68 kg/km

Transmission Performance

Transmission refrontance										
Frequency	4.0	10.0	16.0	31.3	62.5	100	250	500	650	MHz
Attenuation	3.8	5.9	7.5	10.5	15.0	19.1	31.1	45.3	51.1	dB
Return Loss	23.0	25.0	25.0	23.6	21.5	20.1	17.3	17.3	8.0	dB
NEXT	66.3	60.3	57.2	52.9	48.4	45.3	39.3	34.8	22.9	dB
PS NEXT	63.3	57.3	54.2	49.9	45.4	42.3	36.3	31.8	19.8	dB
ELFEXT	56.0	48.0	43.9	38.1	32.1	28.0	20.0	14.0	-	dB
PSELFEXT	53.0	45.0	40.9	35.1	29.1	25.0	17.0	11.0	-	dB

1kV(d.c.) for 1 min

Standards

RoHS2 Compliance Yes Manufactured in accordance to TIA/EIA 568-C.2, ISO/IEC 11801 CE Compliant LVD (2014/35/EU) UV Resistance Good, ISO 4892-3† Weather Resistance Good, ISO 4892-3†

†500 hour test duration, equivalent to 9-12 months of northern Europe climate.

Tru Cables Tel: 01727 840 841 info@trucables.com www.trucables.com

Information and images on this datasheet are intended for guidance only and products may vary due to manufacturing changes, technical improvements and commercial factors. We reserve the right to amend the product information without notice or liability.

ISO 9001:2015 Certificate Number: DAS94272226/0/Q

Part Number: C6GFFHD Date: 24/11/2017

Revision: 24/11/2017

Author: TB Checked: Page Number: 1 of 1