

Twisted-Pair Structured Cabling

Product code: **Spark1001**



U/UTP CAT6, 24AWG Solid Conductor, LSZH Jacket, Dca, Violet

Application

Ethernet 1000BASE-T, Ethernet 100BASE-TX, Ethernet 10BASE-T, PoE++, PoE+, PoE

General

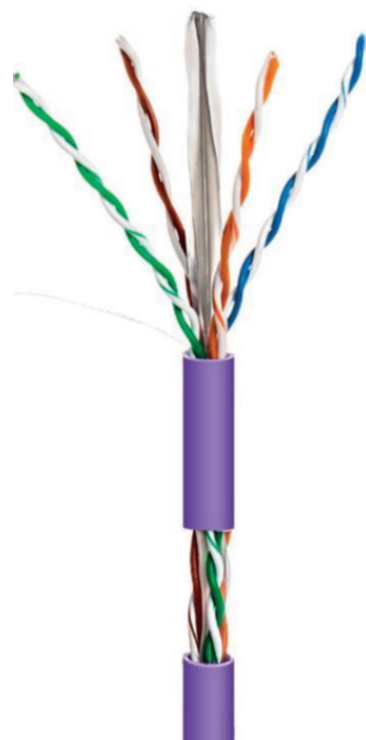
Cable Type	Category 6
Operating Frequency	250 MHz Max.
Conductor	Solid Copper
Number of Pairs	4
Insulation Material	HDPE
Insulation Colour	Blue, White/Blue; Orange, White/Orange; Green, White/Green; Brown, White/Brown
Separator	LDPE
Rip Cord	Yes
Jacket Material	LSZH

Dimensions

Conductor diameter	0.51 ± 0.005 mm
Insulation diameter	0.92 mm
Insulation thickness	0.21 mm
Diameter over jacket	5.60 ± 0.3 mm
Jacket wall thickness	0.50 mm

Mechanical Characteristics

Operating Temperature	-40°C to +70°C
Bend Radius (Stationary Installation)	28 mm 56 mm
Pull Tension	100 N Max.
Before Aging	
Tensile Strength	≥9.5 Mpa
Elongation	≥125 %
After Aging(110°C±2°C,168h)	
Tensile Strength	≥70 % of Unaged
Elongation	≥70 % of Unaged
UV Resistance	ASTM D4329-92 (720hours UL1581)



26th June 2025

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Electrical Characteristics

Transmission Standards	ANSI/TIA-568.2-D (100M FLUKE CHANNEL)
Operating Voltage	80 V Max.
Characteristic Impedance	100 $\pm$ 15 Ohms
Conductor DC Resistance	93.8 Ohms/ km
DC Resistance Unbalance	3 % Max.
Insulation Resistance	5000 MOhms/km Min.
Dielectric Strength	1500 Vac 2500 Vdc Min.
Mutual Capacitance	5.6 nF/100m
Pair to Ground Capacitance Unbalance	330 pF/100m
Velocity of Propagation	69 % Nominal
Delay Skew	45 ns Max.

Standard and Compliance

Flammability	EN 60332-1-2
Reaction to Fire - Bundle Flame Test	EN 50399 (EN 50575:2014+A1:2016)
Halogen Acid Gas Test	IEC 60754-2
RoHS3 (2011/65/EU & (EU) 2015/863	Compliant
REACH	Compliant
Warranty	3 years (full terms and conditions available on request)

OEM Information

Item	Remarks
CPR Classification	CPR Dca, s2,d2,a1
Jacket Colour	PANTONE 7669c
Marking on Cable Jacket	Spark-Net – CAT-6 U/UTP-LSZH, 24AWG-DCA-Solid Copper Conductor
Packing Length	305M
Inner Packing Material	Pull-Box
ISO – 11801-2 + TIA – EIA 568A – 568.2-D	
DoP REF: DC027	