

Product: <u>7839A</u> ☑



T1/DS1 Central Office, 22 AWG 6 PR, Shielded, MPR/CMR

Product Description

22 AWG solid tinned copper conductors, 6 twisted pairs, flame retardant polyolefin insulation, overall Beldfoil® shield (100% coverage), 22 AWG solid tinned copper drain wire, PVC jacket.

Technical Specifications

Physical Characteristics (Overall)

AWG	Stranding	Material	Nominal Diameter	No. of P	airs
22		TC - Tinned Copper	0.0264 in	6	
Conductor Count:				12	

Insulation



Color Chart

Number	Color
1	White/Blue Stripe & Blue/White Stripe
2	White/Orange Stripe & Orange/White Stripe
3	White/Green Stripe & Green/White Stripe
4	White/Brown Stripe & Brown/White Stripe
5	White/Gray Stripe & Gray/White Stripe
6	Red/Blue Stripe & Blue/Red Stripe

Outer Shield

Ту	ре	Material	Material Trade Name	Coverage [%]	Drainwire Material	Drainwire AWG	Drainwire Construction n x D
Та		Bi-Laminate (Alum+Poly)	Beldfoil®	100%	TC - Tinned Copper	22	Solid

Outer Jacket

Material	Nominal Diameter	Ripcord
PVC - Polyvinyl Chloride	0.38 in	Yes

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR
15.4 Ohm/1000ft	3.6 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Conductor	Nom. Capacitance Conductor to Other Conductor to Shield
16 pF/ft	29 pF/ft

Inductance

Nominal Inductance

0.21 µH/ft

Impedance

Nominal Characteristic Impedance
100 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz] 772 kHz

Delay

Nominal Velocity of Propagation (VP) [%] 66%

High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Max./Min. Input Impedance (unFitted)
0.772 MHz	0.6 dB/100m	50 dB	
1 MHz			100 +/- 15 Ohms

Current

Max. Recommended Current [A]
3.5 Amps per Conductor at 20°C

Voltage

UL Voltage Rating 300 V RMS

Temperature Range

Installation Temperature Range:	-20°C To +75°C
UL Temp Rating:	75°C
Storage Temperature Range:	-20°C To +75°C
Operating Temperature Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	70 lbs/1000ft
Max. Pull Tension:	93.6 lbs
Min. Bend Radius During Installation:	3.80 in
Min. Bend Radius/Minor Axis:	3.25 in

Standards

NEC/(UL) Compliance:	MPR, CMR
CEC/C(UL) Compliance:	CMR

Applicable Environmental and Other Programs

Environmental Space:	Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No

Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Riser
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Related Part Numbers

Variants

History

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Update and Revision:	Revision Number: 0.306 Revision Date: 04-29-2024	

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