



Product: <u>179DT</u> ☑

Serial Digital Coax, Ultra-miniature, RG179 Type, 28.5 AWG Solid BC, Foil + TC Braid, CMR

## **Product Description**

Low Loss Serial Digital Coax, Riser-CMR, Ultra-miniature, RG-179/U, 28.5 AWG solid bare copper conductor, foam HDPE core, Duofoil, + 95% tinned copper braid, PVC jacket

## **Technical Specifications**

#### **Product Overview**

Suitable Applications:			Broadca	st Mobil Trucks	s, Digital Video, Precision Video, Telecommunication	
Physi	ical Char	acteristics (Ov	verall)			
Condu	ctor					
AWG	Stranding	Material	Nominal	Diameter	No. of Coax	
28.5	Solid	BC - Bare Copper	0.012 in		1	
Conductor Count:			1			
nsulat	ion					
Material Nominal Diameter						
PE - Polyethylene (Foam) 0.056 in						
Table Notes:			Gas Inje	cted		

#### **Outer Shield**

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Tinned Copper (TC)		95%

### **Outer Jacket**

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.1 in

## **Electrical Characteristics**

# Conductor DCR

Nominal Conductor DCR	Outer Conductor DCR
70.5 Ohm/1000ft	8 Ohm/1000ft

#### Capacitance

Nom. Capacitance Conductor to Shield 17.4 pF/ft

### Inductance

Nominal Inductance 0.106 µH/ft

#### Impedance

Nominal Characteristic Impedance 75 Ohm

# Return Loss (RL)

Frequency [MHz]	Minimum Return (RL)
5 - 1600 MHz	23 dB
1600 - 4500 MHz	21 dB
4500 - 6000 MHz	15 dB

### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	1.18 dB/100ft
5 MHz	1.85 dB/100ft
6 MHz	1.99 dB/100ft
7 MHz	2.15 dB/100ft
10 MHz	2.39 dB/100ft
12 MHz	2.5 dB/100ft
67.5 MHz	5.3 dB/100ft
71.5 MHz	5.5 dB/100ft
88.5 MHz	6 dB/100ft
100 MHz	6.4 dB/100ft
135 MHz	7.2 dB/100ft
143 MHz	7.5 dB/100ft
180 MHz	8.3 dB/100ft
270 MHz	10.2 dB/100ft
360 MHz	11.8 dB/100ft
540 MHz	14.6 dB/100ft
720 MHz	17 dB/100ft
750 MHz	17.4 dB/100ft
1000 MHz	20.2 dB/100ft
1500 MHz	24.8 dB/100ft
2000 MHz	28.9 dB/100ft
2250 MHz	30.9 dB/100ft
3000 MHz	35.9 dB/100ft
4500 MHz	45 dB/100ft
6000 MHz	58 dB/100ft

### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.29 ns/ft	79%

# Voltage

UL Voltage Rating 300 V RMS

# **Temperature Range**

UL Temp Rating:	75°C
Operating Temp Range:	-30°C To +75°C

## **Mechanical Characteristics**

UV Resistance:	Yes
Bulk Cable Weight:	8 lbs/1000ft
Max. Pull Tension:	14 lbs
Min. Bend Radius/Minor Axis:	1 in

# **Standards**

NEC/(UL) Compliance:	CMR
CEC/C(UL) Compliance:	CMG
CPR Euroclass:	Eca
RG Type:	179

# **Applicable Environmental and Other Programs**

Environmental Space:	Indoor - Riser

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/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:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
	Yes

### **Suitability**

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	No

### Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1666 Vertical Shaft	
IEC Flammability:	IEC 60332-1-2	
Other Flammability:	UN ECE R118.02	
UL voltage rating:	300 V RMS	

## Plenum/Non-Plenum

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	Plenum (Y/N):	No	

### **Related Part Numbers**

#### Variants

Item #	Color	Put-Up Type	Length	UPC
179DT 010500	Black	Reel	500 ft	612825358558
179DT 0101000	Black	Reel	1,000 ft	612825358534
179DT 0108200	Black	Reel	8,200 ft	612825440390
179DT 0061000	Blue, Light	Reel	1,000 ft	612825358541
179DT 0011000	Brown	Reel	1,000 ft	612825357032
179DT 0081000	Gray	Reel	1,000 ft	612825356981
179DT N3U1000	Green, Mil	Reel	1,000 ft	612825357049
179DT 0031000	Orange	Reel	1,000 ft	612825357018
179DT 0021000	Red	Reel	1,000 ft	612825357025
179DT 0071000	Violet	Reel	1,000 ft	612825356998
179DT 0091000	White	Reel	1,000 ft	612825356974
179DT 0041000	Yellow	Reel	1,000 ft	612825357001

C - CRATE REEL PUT-UP. Footnote:

### **History**

Update and Revision:	Revision Number: 0.357 Revision Date: 12-15-2021

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