

# 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**

Environmental Space:	Indoor - Riser
Suitable Applications:	Broadcast Mobil Trucks, Digital Video, Precision Video, Telecommunications

# **Physical Characteristics (Overall)**

### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
28.5	Solid	BC - Bare Copper	0.012 in	1
Condu	ctor Count:		1	

#### Insulation

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.056 in

#### **Outer Shield Material**

Туре	Layer	Material	Material Trade Name	Coverage [%]
Таре	1	Aluminum/Polyester/Aluminum	Duofoil®	100 %
Braid	2	TC - Tinned Copper 95 %		95 %

### **Outer Jacket Material**

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	79.0 %

### 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 Recommended Pulling Tension:	14 lbs
Min Bend Radius/Minor Axis:	1 in

# Standards

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

# **Applicable Environmental and Other Programs**

EU Directive 2000/53/EC (ELV):

Yes

EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	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
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

No

#### Plenum/Non-Plenum

Plenum	(Y/N)·	

### **Part Number**

#### Variants

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

# **History**

Update and Revision:

Revision Number: 0.255 Revision Date: 01-31-2020

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