# **Detailed Specifications & Technical Data**

METRIC MEASUREMENT VERSION



1829BC Coax - Series 6

For more Information please call

1-800-Belden1



# **Description:**

Series 6, 18 AWG solid .040" bare copper conductor, gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), black polyethylene jacket.

# **Physical Characteristics (Overall)**

### Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BCAC - Bare Copper w/Anti-Corrosion Treatment	1.02362
Total N	umbe	r of Cond	uctors: 1	
Corrosi	ion R	esistance	: Yes	

### Insulation

### **Insulation Material:**

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	4.572

### **Outer Shield**

# **Outer Shield Material:**

Layer # Outer Shield Trade Name Type		Туре	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60

Outer Shield Flooding Grease: CoreGuard®

### **Outer Jacket**

### **Outer Jacket Material:**



### **Overall Cable**

Overall Nominal Diameter: 6.858 mm

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-55°C To +80°C		
Non-UL Temperature Rating:	80°C		
Bulk Cable Weight:	35.717 Kg/Km		
Max. Recommended Pulling Tension:	355.856 N		
Min. Bend Radius/Minor Axis:	69.850 mm		

# **Applicable Specifications and Agency Compliance (Overall)**

# **Applicable Standards & Environmental Programs**

EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004

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EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Series Type:	Series 6
Suitability	
Suitability - Burial:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No

# **Electrical Characteristics (Overall)**

# Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)		
75	± 3		

### Nom. Inductance:



# Nom. Capacitance Conductor to Shield:



# **Nominal Velocity of Propagation:**



# **Nominal Delay:**

**Delay (ns/m)** 3.9372

# Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 20.9984

# Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 29.529

### Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	1.6405
55	4.5934
211	8.5306
500	13.4521
750	16.7331
862	18.0455
1000	19.686
1450	25.5918
1800	28.2166
2250	32.1538
3000	37.0753

#### Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	2.19827
55	5.2496
211	9.41647
500	14.6989
750	18.3408
862	19.6204

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1000	21.4577
1450	26.248
1800	28.8728
2250	32.81
3000	39.0439

### Max. Operating Voltage - Non-UL:

Voltage 300 V RMS

### **Minimum Structural Return Loss:**

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)	
950	2250	15	
2250	3000	10	

#### **Sweep Test**

Sweep Testing: 950 MHz - 3 GHz

### **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1829BC 0101000	305 MT	12.247 KG	BLACK	С	#18 LDPE/GIFHDLDPE SH PE

#### Notes:

C = CRATE REEL PUT-UP.

Revision Number: 5 Revision Date: 03-13-2012

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