

7810SB Coax - Low Loss 50 Ohm Wireless RF Transmission Cable

 	<p>For more information please call 1-800-Belden1</p> <p><u>See Put-ups and Colors</u></p>
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Description:

10 AWG solid .108" bare copper-covered aluminum conductor, gas-injected foam HDPE insulation, Duobond® II + tinned copper braid shield (95% coverage), LSZH jacket.

SUITABLE APPLICATIONS:

Suitable Applications	Wireless RF, ABS Type Approved, CMG-LS, IEEE 45 clause 23, IEC 60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034, UL1865 FT4 Loading, Limited Smoke, IEC 60332-3-22 (Category A), 60332-1, IEEE 1202
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PHYSICAL CHARACTERISTICS:

CONDUCTOR:

Number of Coax	1
Total Number of Conductors	1
RG Type	8/U
Series Type	8/U
AWG	10
Stranding	Solid
Conductor Diameter	.108 in.
Conductor Material	BCCA - Bare Copper Covered Aluminum

INSULATION:

Insulation Material	Gas-injected FHDPE - Foam High Density Polyethylene
Insulation Diameter	.285 in.

OUTER SHIELD:

Outer Shield Material Trade Name	Duobond® II
Outer Shield Type	Tape/Braid

Outer Shield Material :

Layer Number	Trade Name	Type	Material	% Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	95

Outer Shield % Coverage	100 %
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OUTER JACKET:

Outer Jacket Material	LSZH - Low Smoke Zero Halogen
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OVERALL NOMINAL DIAMETER:

Overall Nominal Diameter	.405 in.
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MECHANICAL CHARACTERISTICS:

Operating Temperature Range	-30°C To +75°C
UL Temperature Rating	75°C
Non-UL Temperature Rating	80°C
Bulk Cable Weight	92 lbs/1000 ft.
Max. Recommended Pulling Tension	150 lbs.
Min. Bend Radius (Install)	4 in.

APPLICABLE SPECIFICATIONS AND AGENCY COMPLIANCE:

APPLICABLE STANDARDS:

NEC/(UL) Specification	CMG-LS
CEC/C(UL) Specification	CMG-LS
IEEE Specification	Std. 45 clause 23
IEC Specification	60092-376 clause 17, 60092-351, 60754-1, 60754-2, 61034
EU CE Mark (Y/N)	Yes
EU RoHS Compliant (Y/N)	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	08/07/2006
Other Specification	UL444

FLAME TEST:

UL Flame Test	UL1685 FT4 Loading, Limited Smoke
C(UL) Flame Test	FT4, Limited Smoke
IEC Flame Test	60332-3-22 (Category A), 60332-1
IEEE Flame Test	1202

SWEEP TEST:

Sweep Testing	100% Sweep tested to 6 GHz.
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SUITABILITY:

Suitability - Indoor	Yes
Suitability - Outdoor	Yes
Suitability - Aerial	Yes - When supported by a messenger
Sunlight Resistance	Yes

PLENUM/NON-PLENUM:

Plenum (Y/N)	N
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ELECTRICAL CHARACTERISTICS:

Nom. Characteristic Impedance	50 Ohms
Nom. Inductance	0.060 µH/ft

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Nom. Capacitance Conductor to Shield	23.0 pF/ft
Nominal Velocity of Propagation	86 %
Nominal Delay	1.17 ns/ft
Nom. Conductor DC Resistance @ 20 Deg. C	1.34 Ohms/1000 ft
Nominal Outer Shield DC Resistance @ 20 Deg.C	2 Ohms/1000 ft

Maximum VSWR :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Maximum VSWR
		5	6000	1.25:1

Nom. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Nom. Attenuation (dB/100 ft.)
	30			0.7
	50			0.9
	150			1.5
	220			1.8
	450			2.7
	900			3.8
	1500			5.1
	1800			5.6
	2000			6.0
	2500			6.7
	3000			7.5
	3500			8.2
	4500			9.5
	5800			11.1
	6000			11.4

Max. Attenuation :

Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Attenuation (dB/100 ft.)
	30			0.70
	50			0.93
	150			1.58
	220			1.94
	450			2.83
	900			4.06
	1500			5.32
	1800			5.98
	2000			6.35
	2500			7.08
	3000			7.97
	3500			8.80
	4500			10.23
	5800			12.00
	6000			12.23

Max. Power Rating :

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Description	Frequency (MHz)	Start Frequency (MHz)	Stop Frequency (MHz)	Max. Power Rating (W)
	30			3427
	50			2588
	150			1428
	220			1195
	450			817
	900			575
	1500			437
	1800			399
	2000			375
	2500			334
	3000			305
	3500			282
	4500			247
	5800			217
	6000			213

Max. Operating Voltage - Non-UL

300 V RMS

PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
7810SB 0101000	#10 LDPE/GIFHDLDP SH FRNHPO	1000	97	BLACK	C

C = CRATE REEL PUT-UP.

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