

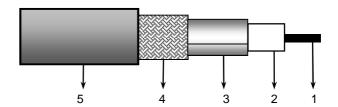
Technical Data Sheet

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70081

Low Loss Serial Digital Video coax RG59/U bonded Al-foil Cu PVC HDTV Duobond II 80%TC Braid



Applications

- Low loss HDTV/SDI Digital coax used in analog and digital video circuits and high quality applications.
- The cable is UV-resistant and suitable for indoor and outdoor use.
- Use of 1080p/50 applications

General Standards

- SDTV/HDTV serial digital standard compliant
- European standard EN 50117-1
- European standard EN 50290-2-20

Construction & Dimensions

1. Inner conductor

Material Solid bare copper Dimension 0.81 mm \pm 0.03 mm

2. Dielectric

Material Gas injected PE Diameter 3.68 mm \pm 0.15 mm

3. Foil

Material AL-PET-AL bonded to dielectric Foil overlap: ≥ 2 mm

4. Braid

Material Tinned copper Coverage $80\% \pm 5\%$ Nominal diameter screen 4.4 mm

5. Jacket
Material

Diameter 5.92 mm \pm 0.2 mm

Mechanical characteristics

Parameter	Specification	Unit
Tensile strength of sheath	≥ 9.0	N/mm2
Elongation at break of sheath	≥ 125	%
Maximum tensile strength of cable	200	N
Minimum static bend radius	60	mm

PVC

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Electrical characteristics

Parameter		Specification	Unit
Mean characteristic impedance		75 ± 3	Ω
Nominal DC resistance inner conductor		32	Ω/km
Nominal DC resistance outer conductor		12	Ω/km
Capacitance		53 ± 2	pF/m
Velocity of propagation		0.83	
Nominal delay:		4.0	Ns/m
Insulation resistance		≥ 10 ⁴	MΩ.km
Dielectric strength		2	kVdc
Return loss at			
	5 – 1600 MHz	≥ 23	dB
	600 – 4500 MHz	≥ 21	dB

Attenuation at:	Nominal	Unit
1 MHz:	1.0	dB/100m
3.6 MHz:	2.0	dB/100m
10 MHz:	3.0	dB/100m
71.5 MHz:	6.9	dB/100m
135 MHz:	8.9	dB/100m
270 MHz:	12.5	dB/100m
360 MHz:	14.4	dB/100m
540 MHz:	18.1	dB/100m

Attenuation at:	Nominal	Unit
720 MHz:	21.0	dB/100m
750 MHz:	21.3	dB/100m
1000 MHz:	24.9	dB/100m
1500 MHz:	30.5	dB/100m
2250 MHz:	38.0	dB/100m
3000 MHz:	44.0	dB/100m
4500 MHz:	53.8	dB/100m

Environmental and overall characteristics

Parameter	Specification	Unit
Storage/operating temperature	-30 to +70	°C
Minimum installation temperature	-5	°C
Resistance to flame propagation according IEC 60332-1	Pass	

Belden declares this product to be in compliance with the environmental regulations EU RoHS (Directive 2002/95/EC, 27 January 2003); this is valid for all material produced after the RoHS compliant date for this product.