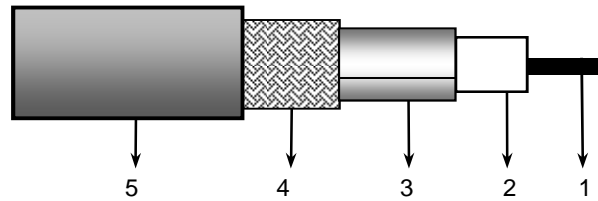


70082NH

**Low Loss Serial Digital Video coax
RG6/U bonded-Al-foil Cu FRNC 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 | bare copper |
| Dimension | 1.02 mm ± 0.03 mm |
| 2. Dielectric | |
| Material | gas injected PE |
| Diameter | 4.57 mm ± 0.15 mm |
| 3. Foil | |
| Material | AL-PET-AL bonded to dielectric |
| Foil overlap: | ≥ 2 mm |
| 4. Braid | |
| Material | tinned copper |
| Coverage | 80 ± 5 % |
| Nominal diameter screen | 5.3 mm |
| 5. Jacket | |
| Material | LSNH/FRNC |
| Diameter | 6.96 mm ± 0.2 mm |

Mechanical characteristics

| Parameter | Specification | Unit |
|-----------------------------------|---------------|-------------------|
| Tensile strength | ≥ 9.0 | N/mm ² |
| Elongation at break | ≥ 125 | % |
| Maximum tensile strength of cable | 300 | N |
| Minimum static bend radius | 70 | mm |

Electrical characteristics

| Parameter | Specification | Unit |
|---------------------------------------|-------------------|-------|
| Mean characteristic impedance | 75 ± 3 | Ω |
| Nominal DC resistance inner conductor | 21 | Ω/km |
| Nominal DC resistance outer conductor | 9.7 | Ω/km |
| Capacitance | 53 ± 2 | pF/m |
| Velocity of propagation | 0.82 | |
| Nominal delay: | 4.07 | ns/m |
| Insulation resistance | ≥ 10 ⁴ | MΩ.km |
| Dielectric strength | 2 | kVdc |
| Return loss at | | |
| | 5 – 1600 MHz | ≥ 23 |
| | 1600 – 4500 MHz | ≥ 21 |

| Attenuation at: | Nominal | Unit |
|-----------------|---------|---------|
| 1 MHz: | 0.8 | dB/100m |
| 10 MHz: | 2.4 | dB/100m |
| 71.5 MHz: | 5.6 | dB/100m |
| 135 MHz: | 7.4 | dB/100m |
| 270 MHz: | 10.4 | dB/100m |
| 360 MHz: | 12.1 | dB/100m |
| 540 MHz: | 15.0 | dB/100m |

| Attenuation at: | Nominal | Unit |
|-----------------|---------|---------|
| 720 MHz: | 17.5 | dB/100m |
| 750 MHz: | 17.9 | dB/100m |
| 1000 MHz: | 21.0 | dB/100m |
| 1500 MHz: | 26.0 | dB/100m |
| 2250 MHz: | 32.0 | dB/100m |
| 3000 MHz: | 38.0 | dB/100m |
| 4500 MHz: | 48.0 | dB/100m |

Maximum attenuation is 10 % higher.

Environmental and overall characteristics

| Parameter | Specification | Unit |
|--|---------------|-------|
| Storage/operating temperature | -30 to +70 | °C |
| Minimum installation temperature | -5 | °C |
| Smoke density acc. to IEC 61034-1/2 & EN50268-1/2; transmittance | > 60 | % |
| Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; pH | > 4.3 | |
| Amount of halogen acid gas acc. to IEC 60754-1/2 & EN50267-1/2; | < 10 | µS/mm |
| 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.