



Part Number: 8214
 50 Ohm, RG8, 11 AWG, CM

Product Description

RG-8/U type, 11 AWG stranded (7x19) .108" bare copper conductor, foam polyethylene insulation, bare copper braid shield (95% coverage), PVC jacket.

Technical Specifications

Product Overview

| | |
|----------------------|----------------|
| Environmental Space: | Indoor/Outdoor |
|----------------------|----------------|

Physical Characteristics (Overall)

Conductor

| AWG | Stranding | Material | Nominal Diameter | No. of Coax |
|-----|-----------|------------------|------------------|-------------|
| 11 | 7x19 | BC - Bare Copper | 0.108 in | 1 |

| | |
|------------------|--------|
| Conductor Count: | 1 |
| Conductor Size: | 11 AWG |

Insulation

| Material | Nominal Diameter |
|---------------------------|------------------|
| FPE - Foamed Polyethylene | 0.285 in |

Outer Shield Material

| Type | Material | Coverage [%] |
|-------|------------------|--------------|
| Braid | BC - Bare Copper | 95 % |

Outer Jacket Material

| Material | Nominal Diameter |
|--------------------------|------------------|
| PVC - Polyvinyl Chloride | 0.403 in |

Electrical Characteristics

Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR Conductor Resistance | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--|--------------------------|---------------------|
| 1.2 Ohm/1000ft | 1.2 Ohm/1000ft | 1.1 Ohm/1000ft | 1.1 Ohm/1000ft |

Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 26 pF/ft |

Inductance

| Nominal Inductance |
|--------------------|
| 0.065 μ H/ft |

Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 50 Ohm |

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz | 0.1 dB/100ft |
| 10 MHz | 0.5 dB/100ft |
| 50 MHz | 1.2 dB/100ft |
| 100 MHz | 1.7 dB/100ft |
| 200 MHz | 2.6 dB/100ft |
| 400 MHz | 3.9 dB/100ft |
| 700 MHz | 5.6 dB/100ft |
| 900 MHz | 6.5 dB/100ft |
| 1000 MHz | 7 dB/100ft |
| 4000 MHz | 21.5 dB/100ft |

Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.3 ns/ft | 78 % |

High Freq

| Frequency [MHz] | Max. Insertion Loss (Attenuation) |
|-----------------|-----------------------------------|
| 400 MHz | 4.2 dB/100ft |
| 10 MHz | |
| 50 MHz | |
| 100 MHz | |
| 200 MHz | |
| 400 MHz | |
| 700 MHz | |
| 900 MHz | |
| 1000 MHz | |
| 4000 MHz | |

Voltage

| Non-UL Voltage Rating | UL Voltage Rating |
|-----------------------|------------------------------|
| 300 V RMS | 300 V RMS |
| | 30 V RMS (UL AWM Style 1354) |

| | |
|-----------------------------------|-----------------------------|
| Electrical Characteristics Notes: | 30 V RMS: UL AWM Style 1354 |
|-----------------------------------|-----------------------------|

Temperature Range

| | |
|-----------------------|--------------------------|
| UL Temp Rating: | 80°C (UL AWM Style 1354) |
| Operating Temp Range: | -40°C To +80°C |

Mechanical Characteristics

| | |
|----------------------------------|----------------|
| Bulk Cable Weight: | 107 lbs/1000ft |
| Max Recommended Pulling Tension: | 230 lbs |
| Min Bend Radius/Minor Axis: | 4 in |

Standards

| | |
|--------------------------|---------------------------|
| NEC/(UL) Specification: | CM |
| CEC/C(UL) Specification: | CM |
| UL AWM Style: | UL Style 1354 (30 V 80°C) |
| CPR Euroclass: | Eca |
| RG Type: | 8/U Type |

Applicable Environmental and Other Programs

| | |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV): | Yes |
| EU Directive 2003/11/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: | No |
| EU RoHS Compliance Date (yyyy-mm-dd): | 2005-10-13 |

| | |
|-----------------------------------|-----|
| CA Prop 65 (CJ for Wire & Cable): | Yes |
| MIL Order #39 (China RoHS): | Yes |

Suitability

| | |
|------------------------|-----|
| Suitability - Aerial: | Yes |
| Suitability - Indoor: | Yes |
| Suitability - Outdoor: | Yes |

Flammability, LSOH, Toxicity Testing

| | |
|--------------------|-----------|
| UL voltage rating: | 300 V RMS |
|--------------------|-----------|

Plenum/Non-Plenum

| | |
|---------------|----|
| Plenum (Y/N): | No |
|---------------|----|

Part Number

Variants

| Item # | Color | Footnote |
|--------------|-------|----------|
| 8214 010100 | Black | C |
| 8214 0101000 | Black | C |
| 8214 010500 | Black | C |

| | |
|-----------|------------------------|
| Footnote: | C - CRATE REEL PUT-UP. |
|-----------|------------------------|

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