

**Part Number: 8259**

50 Ohm, RG58 Type, 20 AWG Stranded TC, TC Braid, PVC Jacket



**Product Description**

50 Ohm, RG-58A/U type, 20 AWG stranded (19x33) .035" tinned copper conductor, polyethylene insulation, tinned copper braid shield (95% coverage), PVC jacket.

**Technical Specifications**

**Product Overview**

|                      |                              |
|----------------------|------------------------------|
| Environmental Space: | Indoor (Not Riser or Plenum) |
|----------------------|------------------------------|

**Physical Characteristics (Overall)**

**Conductor**

| AWG | Stranding | Material           | Nominal Diameter | No. of Coax |
|-----|-----------|--------------------|------------------|-------------|
| 20  | Stranded  | TC - Tinned Copper | 0.035 in         | 1           |

|                  |        |
|------------------|--------|
| Conductor Count: | 1      |
| Conductor Size:  | 20 AWG |

**Insulation**

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - Polyethylene | 0.117 in         |

**Outer Shield Material**

| Type  | Material           | Coverage [%] |
|-------|--------------------|--------------|
| Braid | TC - Tinned Copper | 95 %         |

**Outer Jacket Material**

| Material                 | Nominal Diameter | Nominal Wall Thickness |
|--------------------------|------------------|------------------------|
| PVC - Polyvinyl Chloride | 0.193 in         | 0.0275 in              |

**Electrical Characteristics**

**Conductor DCR**

| Nominal Conductor DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------|---------------------|
| 10.8 Ohm/1000ft       | 4.1 Ohm/1000ft           | 4.1 Ohm/1000ft      |

**Capacitance**

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 30.8 pF/ft                           |

**Inductance**

| Nominal Inductance |
|--------------------|
| 0.092 $\mu$ H/ft   |

**Impedance**

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

**High Frequency (Nominal/Typical)**

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.4 dB/100ft        |
| 10 MHz          | 1.5 dB/100ft        |
| 50 MHz          | 3.7 dB/100ft        |
| 100 MHz         | 5.4 dB/100ft        |
| 200 MHz         | 8.1 dB/100ft        |
| 400 MHz         | 12.4 dB/100ft       |
| 700 MHz         | 17.7 dB/100ft       |
| 900 MHz         | 21.1 dB/100ft       |
| 1000 MHz        | 22.8 dB/100ft       |

#### Delay

| Nominal Delay | Nominal Velocity of Propagation (VP) [%] |
|---------------|--|
| 1.54 ns/ft    | 66 %                                     |

#### Voltage

| Non-UL Voltage Rating |
|-----------------------|
| 1400 V RMS            |

#### Temperature Range

|                       |                |
|-----------------------|----------------|
| Non-UL Temp Rating:   | 75°C           |
| Operating Temp Range: | -30°C To +75°C |

#### Mechanical Characteristics

|                                  |               |
|----------------------------------|---------------|
| Bulk Cable Weight:               | 25 lbs/1000ft |
| Max Recommended Pulling Tension: | 39 lbs        |
| Min Bend Radius/Minor Axis:      | 2 in          |

#### Standards

|                |            |
|----------------|------------|
| CPR Euroclass: | Eca        |
| RG Type:       | 58A/U Type |

#### Applicable Environmental and Other Programs

|                                       |                               |
|---------------------------------------|-------------------------------|
| EU Directive 2000/53/EC (ELV):        | Yes                           |
| EU Directive 2003/96/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): | 2004-01-01                    |
| CA Prop 65 (CJ for Wire & Cable):     | Yes                           |
| MII Order #39 (China RoHS):           | Yes                           |

#### Suitability

|                                    |  |
|------------------------------------|--|
| Suitability - Aerial:              | Yes - Black only, when supported by messenger wire |
| Suitability - Burial:              | No   |
| Suitability - Hazardous Locations: | No   |
| Suitability - Indoor:              | Yes  |
| Suitability - Outdoor:             | Yes - Black only                                   |

#### Flammability, LSOH, Toxicity Testing

|                       |               |
|-----------------------|---------------|
| ISO/IEC Flammability: | IEC 60332-1-2 |
|-----------------------|---------------|

#### Plenum/Non-Plenum

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

#### Part Number

#### Variants

| Item #        | Color | UPC          | Length   | Footnote |
|---------------|-------|--------------|----------|----------|
| 8259 010100   | Black | 612825197379 | 100 ft   |          |
| 8259 0101000  | Black | 612825197386 | 1,000 ft | C        |
| 8259 010500   | Black | 612825197393 | 500 ft   | C        |
| 8259 0105000  | Black | 612825197348 | 5,000 ft | C        |
| 8259 010U1000 | Black | 612825197355 | 1,000 ft |          |
| 8259 010U500  | Black | 612825357636 | 500 ft   |          |

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

## History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.276 Revision Date: 07-11-2019 |
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