

## Product: [9251](#)

52 Ohm, RG8, 13 AWG, CMX



### Product Description

RG-8/U type, 13 AWG stranded (7x21) .085" bare copper conductor, polyethylene insulation, bare copper braid shield (95% coverage), non-contaminating PVC jacket.

### Technical Specifications

#### Physical Characteristics (Overall)

##### Conductor

| AWG | Stranding | Material         | Nominal Diameter | No. of Coax |
|-----|-----------|------------------|------------------|-------------|
| 13  | 7x21      | BC - Bare Copper | 0.085 in         | 1           |

Conductor Count: 1

##### Insulation

| Material          | Nominal Diameter | Nominal Wall Thickness |
|-------------------|------------------|------------------------|
| PE - Polyethylene | 0.285 in         | 0.285 in               |

##### Outer Shield

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

##### Outer Jacket

| Material                                     | Nominal Diameter |
|--|------------------|
| PVC - Polyvinyl Chloride (Non-Contaminating) | 0.405 in         |

#### Electrical Characteristics

##### Conductor DCR

| Nominal Conductor DCR | Nominal Conductor DCR Conductor Resistance | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--|--------------------------|---------------------|
| 1.9 Ohm/1000ft        | 1.9 Ohm/1000ft                             | 1.2 Ohm/1000ft           | 1.2 Ohm/1000ft      |

##### Capacitance

| Nom. Capacitance Conductor to Shield |
|--------------------------------------|
| 28.5 pF/ft                           |

##### Inductance

| Nominal Inductance |
|--------------------|
| 0.079 $\mu$ H/ft   |

##### Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 52 Ohm                           |

##### High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.2 dB/100ft        |
| 10 MHz          | 0.6 dB/100ft        |

|          |               |
|----------|---------------|
| 50 MHz   | 1.3 dB/100ft  |
| 100 MHz  | 1.9 dB/100ft  |
| 200 MHz  | 2.8 dB/100ft  |
| 400 MHz  | 4.2 dB/100ft  |
| 700 MHz  | 5.9 dB/100ft  |
| 900 MHz  | 6.9 dB/100ft  |
| 1000 MHz | 7.4 dB/100ft  |
| 4000 MHz | 23.2 dB/100ft |

#### Delay

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

#### Voltage

| Non-UL Voltage Rating | UL Voltage Rating            |
|-----------------------|------------------------------|
| 3700 V RMS            | 150 V RMS                    |
|                       | 30 V RMS (UL AWM Style 1354) |

#### Temperature Range

|                              |                |
|------------------------------|----------------|
| UL Temperature Rating:       | 60°C           |
| Operating Temperature Range: | -40°C To +80°C |

#### Mechanical Characteristics

|                                      |                |
|--------------------------------------|----------------|
| Bulk Cable Weight:                   | 105 lbs/1000ft |
| Maximum Recommended Pulling Tension: | 190 lbs        |
| Minimum Minor Axis Bend Radius:      | 4 in           |

#### Standards

|                          |                      |
|--------------------------|----------------------|
| NEC/(UL) Compliance:     | CMX                  |
| CEC/C(UL) Compliance:    | CMX                  |
| UL AWM Style Compliance: | AWM 1354 (30 V 60°C) |
| RG Type:                 | 8                    |

#### Applicable Environmental and Other Programs

|  |                               |
|--|-------------------------------|
| Environmental Space:                         | Indoor (Not Riser or Plenum)  |
| EU Directive 2000/53/EC (ELV):               | Yes                           |
| EU Directive 2003/11/EC (BFR):               | Yes                           |
| EU Directive 2011/65/EU (RoHS 2):            | Yes                           |
| EU Directive 2012/19/EU (WEEE):              | Yes                           |
| EU Directive 2015/863/EU (RoHS 2 amendment): | Yes                           |
| EU Directive Compliance:                     | EU Directive 2003/11/EC (BFR) |
| EU CE Mark:                                  | Yes                           |
| MII Order #39 (China RoHS):                  | Yes                           |

#### Suitability

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

#### Flammability, LS0H, Toxicity Testing

|                    |           |
|--------------------|-----------|
| UL Flammability:   | VW-1      |
| UL voltage rating: | 150 V RMS |

#### Plenum/Non-Plenum

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

#### Related Part Numbers

#### Variants

| Item # | Color | Put-Up Type | Length | UPC |
|--------|-------|-------------|--------|-----|
|        |       |             |        |     |

|              |       |      |          |              |
|--------------|-------|------|----------|--------------|
| 9251 010500  | Black | Reel | 500 ft   | 612825225782 |
| 9251 0101000 | Black | Reel | 1,000 ft | 612825225775 |

Footnote:

C - CRATE REEL PUT-UP.

## History

Update and Revision:

Revision Number: 0.386 Revision Date: 02-03-2025

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