

**Part Number: 8237**

50 Ohm, RG8, 13 AWG, CMH



## Product Description

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

## Technical Specifications

### Product Overview

|                      |                  |
|----------------------|------------------|
| Environmental Space: | Outdoor - Aerial |
|----------------------|------------------|

### Physical Characteristics (Overall)

#### Conductor

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

|                  |        |
|------------------|--------|
| Conductor Count: | 1      |
| Conductor Size:  | 13 AWG |

#### Insulation

| Material          | Nominal Diameter |
|-------------------|------------------|
| PE - 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 Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------|---------------------|
| 1.9 Ohm/1000ft        | 1.2 Ohm/1000ft           | 1.2 Ohm/1000ft      |

#### Capacitance

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

|            |          |
|------------|----------|
| Shielding: | Braid(s) |
|------------|----------|

#### Inductance

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

#### Impedance

| Nominal Characteristic Impedance |
|----------------------------------|
| 50 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 %                                     |

#### Power Rating

| Frequency [MHz] | Max. Power Rating [W] | Nominal Power Rating [W] |
|-----------------|-----------------------|--------------------------|
| 50 MHz          | 1,200 W               | 1,200 W                  |
| 100 MHz         | 800 W                 | 800 W                    |
| 400 MHz         | 320 W                 | 320 W                    |
| 1,000 MHz       | 180 W                 | 180 W                    |

#### Voltage

| Non-UL Voltage Rating |
|-----------------------|
| 3700V RMS             |

#### Temperature Range

|                       |                |
|-----------------------|----------------|
| UL Temp Rating:       | 75°C           |
| Operating Temp Range: | -40°C To +75°C |

#### Mechanical Characteristics

|                                  |                |
|----------------------------------|----------------|
| Bulk Cable Weight:               | 102 lbs/1000ft |
| Max Recommended Pulling Tension: | 190 lbs        |
| Min Bend Radius/Minor Axis:      | 4.25 in        |

#### Standards

|                          |          |
|--------------------------|----------|
| NEC/(UL) Specification:  | CMH      |
| CEC/C(UL) Specification: | CMH      |
| CPR Euroclass:           | Eca      |
| RG Type:                 | 8/U Type |
| RG / Series Type:        | 8/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 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                                   |

#### Plenum/Non-Plenum

Plenum (Y/N): No

**Part Number**

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**Variants**

| Item #       | Color | Footnote |
|--------------|-------|----------|
| 8237 010100  | BLACK | C        |
| 8237 0101000 | BLACK | C        |
| 8237 010500  | BLACK | C        |

Footnote: C - CRATE REEL PUT-UP.

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