




**Product:** [8268](#) 

50 Ohm, RG214, 13 AWG Stranded SPC, Double SPC Braid, CMX Non-contaminating PVC Jacket, Commerical Non-QPL Product.

## Product Description

50 Ohm, RG-214/U, 13 AWG stranded (7x21) .089" silver-plated copper conductor, polyethylene insulation, double silver-plated copper braid shield (95% coverage), CMX non-contaminating PVC jacket, commerical non-QPL product.

## Technical Specifications

### Product Overview

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

### Physical Characteristics (Overall)

#### Conductor

| AWG | Stranding | Material                                   | Nominal Diameter | No. of Coax |
|-----|-----------|--|------------------|-------------|
| 13  | Stranded  | SPCCS - Silver Plated Copper Covered Steel | 0.089 in         | 1           |

|                  |   |
|------------------|---|
| Conductor Count: | 1 |
|------------------|---|

#### Insulation

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

#### Outer Shield Material

| Type  | Layer | Material                   | Coverage [%] |
|-------|-------|----------------------------|--------------|
| Braid | 1     | SPC - Silver Plated Copper | 95 %         |
| Braid | 2     | SPC - Silver Plated Copper | 95 %         |

#### Outer Jacket Material

| Material                                     | Nominal Diameter |
|--|------------------|
| PVCNC - Polyvinyl Chloride Non-Contaminating | 0.425 in         |

### Electrical Characteristics

#### Conductor DCR

| Nominal Conductor DCR | Nominal Outer Shield DCR | Outer Conductor DCR |
|-----------------------|--------------------------|---------------------|
| 1.7 Ohm/1000ft        | 0.7 Ohm/1000ft           | 0.7 Ohm/1000ft      |

#### Capacitance

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

#### Inductance

| Nominal Inductance |
|--------------------|
| 0.077 $\mu$ H/ft   |

#### Impedance

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

High Frequency (Nominal/Typical)

| Frequency [MHz] | Nom. Insertion Loss |
|-----------------|---------------------|
| 1 MHz           | 0.17 dB/100ft       |
| 10 MHz          | 0.55 dB/100ft       |
| 50 MHz          | 1.3 dB/100ft        |
| 100 MHz         | 1.9 dB/100ft        |
| 200 MHz         | 2.7 dB/100ft        |
| 400 MHz         | 4.1 dB/100ft        |
| 700 MHz         | 6.5 dB/100ft        |
| 900 MHz         | 7.6 dB/100ft        |
| 1000 MHz        | 8 dB/100ft          |
| 4000 MHz        | 20 dB/100ft         |

Delay

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

Power Rating

| Frequency [MHz] | Max. Power Rating [W] |
|-----------------|-----------------------|
| 50 MHz          | 1,500 W               |
| 100 MHz         | 907 W                 |
| 200 MHz         | 549 W                 |
| 400 MHz         | 332 W                 |
| 700 MHz         | 221 W                 |
| 900 MHz         | 184 W                 |
| 1,000 MHz       | 171 W                 |
| 4,000 MHz       | 62 W                  |

Voltage

| Non-UL Voltage Rating | UL Description    | UL Voltage Rating |
|-----------------------|-------------------|-------------------|
| 3700 V RMS (MIL-Spec) | UL AWM Style 1354 | 30 V RMS          |
|                       | NEC               | 300 V RMS         |

Temperature Range

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

Mechanical Characteristics

|                                  |                  |
|----------------------------------|------------------|
| UV Resistance:                   | Yes - Black only |
| Bulk Cable Weight:               | 131 lbs/1000ft   |
| Max Recommended Pulling Tension: | 225 lbs          |
| Min Bend Radius/Minor Axis:      | 6 in             |

Standards

|                             |   |
|-----------------------------|---|
| NEC/(UL) Specification:     | CMX   |
| CEC/C(UL) Specification:    | CMX   |
| UL AWM Style:               | UL Style 1354                               |
| CPR Euroclass:              | Eca   |
| RG Type:                    | 214/U Type                                  |
| Military Specification:     | Commercial, non-QPL product (M17/164-00001) |
| QPL (Qualified Parts List): | No  |

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): | 2005-10-01 |
| CA Prop 65 (CJ for Wire & Cable):     | Yes        |
| MIL 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, LS0H, Toxicity Testing

|                       |               |
|-----------------------|---------------|
| UL Flammability:      | VW-1          |
| ISO/IEC Flammability: | IEC 60332-1-2 |
| UL voltage rating:    | 30 V RMS      |

### Plenum/Non-Plenum

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

### Part Number

#### Variants

| Item #       | Color | UPC          | Length   | Footnote |
|--------------|-------|--------------|----------|----------|
| 8268 0101000 | Black | 612825197546 | 1,000 ft | C        |
| 8268 010500  | Black | 612825358084 | 500 ft   | C        |

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

### Product Notes

|        |                                  |
|--------|----------------------------------|
| Notes: | Non-SWR swept version of RG-214. |
|--------|----------------------------------|

### History

|                      |  |
|----------------------|--|
| Update and Revision: | Revision Number: 0.290 Revision Date: 08-22-2019 |
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