

**RG213, 50 Ohm, 1 GHz, 85°C, ø10.3 mm, PVC jacket**

RG\_213\_/U

**Properties**

- Mil standard RG cable
- Excellent RF performance for precision applications
- Suitable for use in application up to 1 GHz



| Construction     |                        |                |                    |
|------------------|------------------------|----------------|--------------------|
| Component        | Material               | Detail         | Diameter           |
| Centre conductor | Copper                 | Strand-07, 96% | 2.25 mm - 0.1 mm   |
| Dielectric       | PE (Polyethylene)      |                | 7.25 mm            |
| Outer conductor  | Copper                 | Braid, 96%     | 8.1 mm             |
| Jacket           | PVC II (low migration) | RAL 9005 - bk  | 10.3 mm +/- 0.1 mm |

| Electrical data                  |                                       |
|----------------------------------|---------------------------------------|
| Impedance                        | 50 Ω +/- 2Ω                           |
| Operating frequency              | ≤ 1 GHz                               |
| Capacitance                      | 101 pF/m                              |
| Velocity of signal propagation   | 66 %                                  |
| Signal delay                     | 5.03 ns/m                             |
| Screening effectiveness          | 40 dB at frequency 0.001 GHz ... 1GHz |
| Insulation resistance            | 100000000 MΩ*m                        |
| Inner conductor resistance       | 5.74 Ω/km                             |
| Operating Voltage (at sea level) | ≤ 5 kVrms                             |
| Test voltage (50 Hz/1 min)       | ≤ 10 kVrms                            |

| Mechanical data         |                 |
|-------------------------|-----------------|
| Weight                  | approx. 153 g/m |
| Static bending radius   | ≥ 50 mm         |
| Repeated bending radius | 100 mm          |

| Environmental data       |                   |
|--------------------------|-------------------|
| Operation temperature    | -25 °C ... 85 °C  |
| Installation temperature | -20 °C ... 60 °C  |
| Fire characteristics     | contains halogene |

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| Additional Information                                        |  |
|---------------------------------------------------------------|--|
| MIL reference: M17/189-00001 (former reference: M17/74-RG213) |  |

| Suitable connectors |     |
|---------------------|-----|
| Cable group         | U29 |

| Ordering information |                  |                            |
|----------------------|------------------|----------------------------|
| Item number          | Item description | Available as assembly only |
| 22510052             | RG_213_/U        | No                         |

| Power Matrix                                                                                             |                                    |                                    |                                    |
|----------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Calculation: typical Attenuation [ formula: (a*f^0.5 + b*f) ] and maximum Power CW [ formula: (p/f^0.5)] |                                    |                                    |                                    |
| a coefficient typical =                                                                                  | 0.1679                             | b coefficient typical =            | 0.0585                             |
| fmax =                                                                                                   | 1.0                                | P at 1 GHz =                       | 416.0                              |
|                                                                                                          |                                    |                                    |                                    |
| Frequency                                                                                                | Nom. attenuation                   | Nom. attenuation                   | CW power                           |
| GHz                                                                                                      | (dB/m)                             | (dB/ft)                            | (W)                                |
|                                                                                                          | sea level 25°C ambient temperature | sea level 25°C ambient temperature | sea level 40°C ambient temperature |
| 0.10                                                                                                     | 0.059                              | 0.018                              | 1316                               |
| 0.20                                                                                                     | 0.087                              | 0.027                              | 930                                |
| 0.30                                                                                                     | 0.110                              | 0.034                              | 760                                |
| 0.40                                                                                                     | 0.130                              | 0.040                              | 658                                |
| 0.60                                                                                                     | 0.165                              | 0.050                              | 537                                |
| 0.80                                                                                                     | 0.197                              | 0.060                              | 465                                |
| 1.00                                                                                                     | 0.226                              | 0.069                              | 416                                |

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