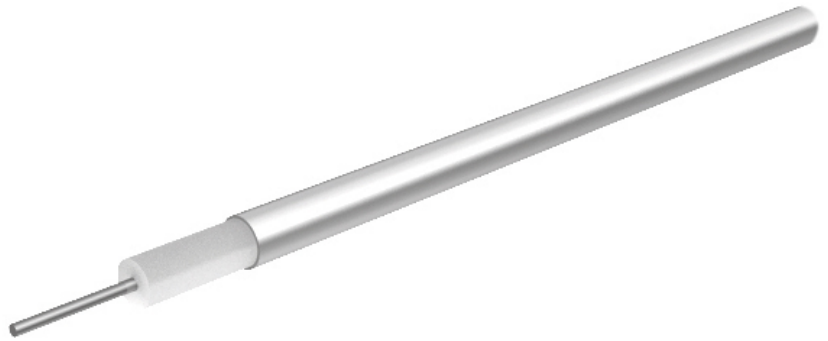


# Semi-rigid, 50 Ohm, 33 GHz, 125°C, ø3.58 mm, Copper/Tin plated

## SR\_141\_CU\_TP

### Properties

- Formstable cable for precise, time saving installations
- Excellent RF screening performance
- Highly efficient RF signal distribution



| Construction     |                                |            |          |
|------------------|--------------------------------|------------|----------|
| Component        | Material                       | Detail     | Diameter |
| Centre conductor | Copper, Silver plated          | Wire       | 0.92 mm  |
| Dielectric       | PTFE (Polytetrafluoroethylene) |            | 2.99 mm  |
| Outer conductor  | Copper, Tin plated             | Tube, 100% | 3.58 mm  |

| Electrical data                  |                                       |
|----------------------------------|---------------------------------------|
| Impedance                        | 50 Ω +/-1Ω                            |
| Operating frequency              | ≤ 33 GHz                              |
| Capacitance                      | 98.1 pF/m                             |
| Velocity of signal propagation   | 69.5 %                                |
| Signal delay                     | 4.8 ns/m                              |
| Screening effectiveness          | 120 dB at frequency 0.1 GHz ... 18GHz |
| Insulation resistance            | 100000000 MΩ*m                        |
| Operating Voltage (at sea level) | ≤ 1.9 kVrms                           |
| Test voltage (50 Hz/1 min)       | ≤ 5 kVrms                             |

| Mechanical data       |                  |
|-----------------------|------------------|
| Weight                | approx. 52.1 g/m |
| Static bending radius | ≥ 6.35 mm        |

| Environmental data       |                   |
|--------------------------|-------------------|
| Operation temperature    | -55 °C ... 125 °C |
| Installation temperature | -20 °C ... 60 °C  |
| Fire characteristics     | contains halogene |

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### SR\_141\_CU\_TP

| Material compliance |                                   |                             |                      |
|---------------------|-----------------------------------|-----------------------------|----------------------|
| Item number         | Directive / Regulation            | Rating                      | Exemptions / Details |
| 22820050            | RoHS 2011/65/EU and (EU) 2015/863 | Compliant without exemption |                      |
|                     | REACH 1907/2006 Article 33 SVHC   | Compliant                   |                      |
| 22830050            | RoHS 2011/65/EU and (EU) 2015/863 | Compliant without exemption |                      |
|                     | REACH 1907/2006 Article 33 SVHC   | Compliant                   |                      |
| 22810050            | RoHS 2011/65/EU and (EU) 2015/863 | Compliant without exemption |                      |
|                     | REACH 1907/2006 Article 33 SVHC   | Free of SVHC >0,1%          |                      |

| Suitable connectors |    |
|---------------------|----|
| Cable group         | Y5 |

| Ordering information |                   |                            |
|----------------------|-------------------|----------------------------|
| Item number          | Item description  | Available as assembly only |
| 22820050             | SR_141_CU_TP_2M   | No                         |
| 22830050             | SR_141_CU_TP_3M   | No                         |
| 22810050             | SR_141_CU_TP_COIL | 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 =                                                                                   | <b>0.32544</b>                     | b coefficient typical =            | <b>0.03967</b>                     |
| fmax =                                                                                                    | <b>33.0</b>                        | P at 1 GHz =                       | <b>450.0</b>                       |
| Frequency<br>GHz                                                                                          | Nom. attenuation<br>(dB/m)         | Nom. attenuation<br>(dB/ft)        | CW power<br>(W)                    |
|                                                                                                           | sea level 25°C ambient temperature | sea level 25°C ambient temperature | sea level 40°C ambient temperature |
| 0.20                                                                                                      | 0.153                              | 0.047                              | 1006                               |
| 0.40                                                                                                      | 0.222                              | 0.068                              | 712                                |
| 0.60                                                                                                      | 0.276                              | 0.084                              | 581                                |
| 0.80                                                                                                      | 0.323                              | 0.098                              | 503                                |
| 1.00                                                                                                      | 0.365                              | 0.111                              | 450                                |
| 1.20                                                                                                      | 0.404                              | 0.123                              | 411                                |
| 1.40                                                                                                      | 0.441                              | 0.134                              | 380                                |
| 1.60                                                                                                      | 0.475                              | 0.145                              | 356                                |
| 1.80                                                                                                      | 0.508                              | 0.155                              | 335                                |
| 2.00                                                                                                      | 0.540                              | 0.165                              | 318                                |
| 4.00                                                                                                      | 0.810                              | 0.247                              | 225                                |
| 6.00                                                                                                      | 1.035                              | 0.315                              | 184                                |
| 8.00                                                                                                      | 1.238                              | 0.377                              | 159                                |
| 10.00                                                                                                     | 1.426                              | 0.435                              | 142                                |
| 20.00                                                                                                     | 2.249                              | 0.685                              | 101                                |
| 33.00                                                                                                     | 3.179                              | 0.969                              | 78                                 |

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