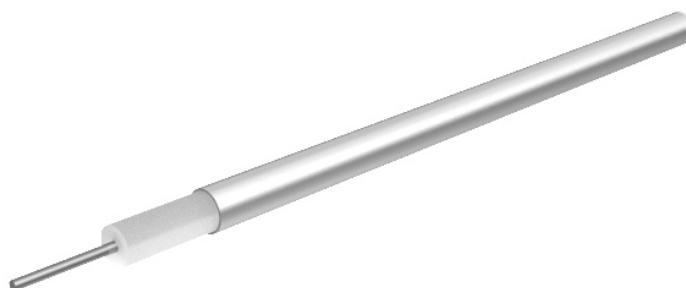


## Formable microwave cable SR\_118\_TP Item: 22820073

### Description

Semi-rigid: Semi-rigid, formable microwave cables

50 Ohm, 40 GHz, 125°C, ø2.95 mm, no jacket



### Technical Data

#### Construction

|                  | Material              | Detail     | Diameter |
|------------------|-----------------------|------------|----------|
| Centre conductor | Copper, Silver plated | Wire       | 0.81 mm  |
| Dielectric       | PTFE-LD               |            | 2.41 mm  |
| Outer conductor  | Copper, Tin plated    | Tube, 100% | 2.95 mm  |

#### Electrical Data

|                                |                                        |
|--------------------------------|----------------------------------------|
| Impedance                      | 50 Ω +/- 1.5                           |
| Operating Frequency            | 40 GHz                                 |
| Capacitance                    | 76.2 pF/m                              |
| Velocity of signal propagation | 80 %                                   |
| Signal delay                   | 4.17 ns/m                              |
| Screening effectiveness        | ≥ 120 dB (up to 18 GHz)                |
| Operating voltage              | ≤ 1.2 kV <sub>rms</sub> (at sea level) |
| Test voltage                   | 3.5 kV <sub>rms</sub> (50 Hz/1 min)    |

#### Mechanical Data

|                     |        |              |
|---------------------|--------|--------------|
| Weight              |        | 3.4 kg/100 m |
| Min. bending radius | static | 9.53 mm      |

#### Environmental Data

|                                                      |                           |
|------------------------------------------------------|---------------------------|
| Temperature range                                    | -55 °C ... +125 °C        |
| Installation temperature                             | -20 °C... +60 °C          |
| Halogen free                                         | No                        |
| 2011/65/EU (RoHS - including 2015/863 and 2017/2102) | compliant                 |
| 1907/2006/EC (REACH)                                 | compliant                 |
| 2000/53/EC (ELV)                                     | compliant                 |
| 2012/19/EU (WEEE)                                    | no special marking needed |

### Additional Information

#### Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

#### Suitable Connectors

|             |                   |
|-------------|-------------------|
| Cable group | Y10 2 mm / 50 Ohm |
|-------------|-------------------|

## Formable microwave cable

### SR\_118\_TP Item: 22820073

**Matrix** typical Attenuation [ formula:  $(a \cdot f^{0.5} + b \cdot f)$  ] and maximum Power CW [ formula:  $(p/f^{0.5})$  ]

Coefficients:

a = 0.3804

b = 0.00791

f<sub>max</sub> = 40

P at 1GHz = 598

| Frequency | Nom. attenuation                          | Nom. attenuation                          | Max. CW power                             |
|-----------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| (GHz)     | (dB / m)                                  | (dB / ft)                                 | (W)                                       |
|           | sea level 25° C<br>ambient<br>temperature | sea level 25° C<br>ambient<br>temperature | sea level 40° C<br>ambient<br>temperature |
| 2.0       | 0.55                                      | 0.169                                     | 423                                       |
| 4.0       | 0.79                                      | 0.242                                     | 299                                       |
| 6.0       | 0.98                                      | 0.298                                     | 244                                       |
| 8.0       | 1.14                                      | 0.347                                     | 211                                       |
| 10.0      | 1.28                                      | 0.391                                     | 189                                       |
| 12.0      | 1.41                                      | 0.431                                     | 173                                       |
| 14.0      | 1.53                                      | 0.468                                     | 160                                       |
| 16.0      | 1.65                                      | 0.502                                     | 150                                       |
| 18.0      | 1.76                                      | 0.535                                     | 141                                       |
| 20.0      | 1.86                                      | 0.567                                     | 134                                       |
| 22.0      | 1.96                                      | 0.597                                     | 127                                       |
| 24.0      | 2.05                                      | 0.626                                     | 122                                       |
| 26.0      | 2.15                                      | 0.654                                     | 117                                       |
| 28.0      | 2.23                                      | 0.681                                     | 113                                       |
| 30.0      | 2.32                                      | 0.707                                     | 109                                       |
| 32.0      | 2.4                                       | 0.733                                     | 106                                       |
| 34.0      | 2.49                                      | 0.758                                     | 103                                       |
| 36.0      | 2.57                                      | 0.782                                     | 100                                       |
| 38.0      | 2.65                                      | 0.806                                     | 97                                        |
| 40.0      | 2.72                                      | 0.830                                     | 95                                        |

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