

## Flexible microwave cable

SUCOFLEX\_526\_S

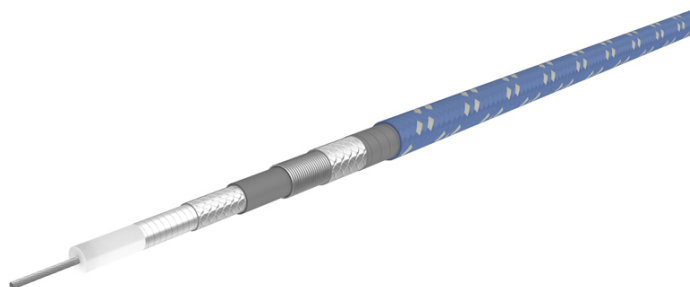
Item: 85082728

Only as Assembly

## Description

SUCOFLEX 500: The phase stable, low loss assemblies for flexible applications

High-flexible, 50 Ohm, 26.5 GHz, 165°C, ø7.7 mm, PTFE jacket



## Technical Data

### Construction

|                                  | Material                             | Detail             | Diameter |
|----------------------------------|--------------------------------------|--------------------|----------|
| Centre conductor                 | Copper, Silver plated                | Strand, Low-loss   |          |
| Dielectric                       | PTFE (Polytetrafluoroethylene)       |                    |          |
| Outer conductor                  | Copper, Silver plated                | wrapped Foil, 100% |          |
| Outer conductor                  | Copper, Silver plated                | Braid              |          |
| Jacket                           | FEP (Fluorinated ethylene propylene) |                    |          |
|                                  |                                      |                    |          |
| Armor: Steel wire helix (Spiral) | Steel                                |                    |          |
| Armor: Steel wire                | Steel                                | Braid              |          |
| Jacket                           | PTFE (Polytetrafluoroethylene)       | RAL 5023 - bl      | 7.7 mm   |

### Electrical Data

|                                |          |
|--------------------------------|----------|
| Impedance                      | 50 Ω     |
| Operating Frequency            | 26.5 GHz |
| Capacitance                    | 87 pF/m  |
| Velocity of signal propagation | 77 %     |
| Signal delay                   | 4.3 ns/m |

### Mechanical Data

|                     |                   |
|---------------------|-------------------|
| Weight              | 144 kg/100 m      |
| Min. bending radius | static<br>25.4 mm |

### Environmental Data

|                                                      |                           |
|------------------------------------------------------|---------------------------|
| Temperature range                                    | -55 °C ... +165 °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 | U98 SUCOFLEX |
|-------------|--------------|

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

Coefficients:

a = 0.229

b = 0.0071

 $f_{\max} = 26.5$ 

P at 1GHz = 800

| 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 |
| 1,32      | 0,27                                      | 0,083                                     | 696                                       |
| 2,65      | 0,39                                      | 0,119                                     | 491                                       |
| 3,97      | 0,48                                      | 0,148                                     | 402                                       |
| 5,3       | 0,56                                      | 0,172                                     | 347                                       |
| 6,62      | 0,64                                      | 0,194                                     | 311                                       |
| 7,95      | 0,7                                       | 0,214                                     | 284                                       |
| 9,28      | 0,76                                      | 0,233                                     | 263                                       |
| 10,6      | 0,82                                      | 0,250                                     | 246                                       |
| 11,92     | 0,88                                      | 0,267                                     | 232                                       |
| 13,25     | 0,93                                      | 0,283                                     | 220                                       |
| 14,58     | 0,98                                      | 0,298                                     | 210                                       |
| 15,9      | 1,03                                      | 0,313                                     | 201                                       |
| 17,22     | 1,07                                      | 0,327                                     | 193                                       |
| 18,55     | 1,12                                      | 0,341                                     | 186                                       |
| 19,88     | 1,16                                      | 0,354                                     | 179                                       |
| 21,2      | 1,2                                       | 0,367                                     | 174                                       |
| 22,52     | 1,25                                      | 0,380                                     | 169                                       |
| 23,85     | 1,29                                      | 0,392                                     | 164                                       |
| 25,18     | 1,33                                      | 0,405                                     | 159                                       |
| 26,5      | 1,37                                      | 0,417                                     | 155                                       |