

# Hand formable, 50 Ohm, 6 GHz, 165°C, ø6.2 mm, FEP jacket

## SUCOFORM\_222\_LA\_CU\_CMP

### Properties

- Hand-formable alternative to semi-rigid cables
- Small bend radius allows for space saving routing and packaging
- Performance comparable to semi-rigid cables
- Non-magnetic
- Plenum rated



| Construction     |                                      |                        |                   |
|------------------|--------------------------------------|------------------------|-------------------|
| Component        | Material                             | Detail                 | Diameter          |
| Centre conductor | Copper, Silver plated                | Wire                   | 1.67 mm           |
| Dielectric       | PTFE (Polytetrafluoroethylene)       |                        | 4.8 mm            |
| Outer conductor  | Copper, Tin plated                   | Tin soaked braid, 100% | 5.65 mm           |
| Jacket           | FEP (Fluorinated ethylene propylene) | RAL 9003 - wh          | 6.2 mm +/- 0.1 mm |

| Electrical data                  |                                       |
|----------------------------------|---------------------------------------|
| Impedance                        | 50 Ω +/-1Ω                            |
| Operating frequency              | ≤ 6 GHz                               |
| Capacitance                      | 83 pF/m                               |
| Velocity of signal propagation   | 76.7 %                                |
| Signal delay                     | 4.3 ns/m                              |
| Screening effectiveness          | 100 dB at frequency 0.1 GHz ... 18GHz |
| Insulation resistance            | 100000000 MΩ*m                        |
| Operating Voltage (at sea level) | ≤ 3.5 kVrms                           |
| Test voltage (50 Hz/1 min)       | ≤ 5 kVrms                             |

| Mechanical data         |                             |
|-------------------------|-----------------------------|
| Weight                  | approx. 100.5 g/m           |
| Static bending radius   | ≥ 25 mm                     |
| Repeated bending radius | 120 mm (bendings, up to 15) |

| Environmental data         |                                      |
|----------------------------|--------------------------------------|
| Operation temperature      | -65 °C ... 165 °C                    |
| Installation temperature   | -20 °C ... 60 °C                     |
| Flame propagation standard | IEC 60332-2<br>UL 1581 § 1080 (VW-I) |

## Hand formable, 50 Ohm, 6 GHz, 165°C, Ø6.2 mm, FEP jacket

### SUCOFORM\_222\_LA\_CU\_CMP

| Environmental data   |                          |
|----------------------|--------------------------|
|                      | ETL Listed UL444/CMP/FT6 |
| Fire characteristics | contains halogene        |
| Smoke test           | NFPA-262 (UL910)         |
| UV resistance        | ISO 4892-2A              |

| Suitable connectors |           |
|---------------------|-----------|
| Cable group         | Y32 - 222 |

| Ordering information |                        |                            |
|----------------------|------------------------|----------------------------|
| Item number          | Item description       | Available as assembly only |
| 85071854             | SUCOFORM_222_LA_CU_CMP | No                         |

| Power Matrix                                                                                                                  |                                    |                                    |                                    |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Calculation: typical Attenuation [ formula: $(a \cdot f^{0.5} + b \cdot f)$ ] and maximum Power CW [ formula: $(p/f^{0.5})$ ] |                                    |                                    |                                    |
| a coefficient typical =                                                                                                       | <b>0.199</b>                       | b coefficient typical =            | <b>0.031</b>                       |
| fmax =                                                                                                                        | <b>6</b>                           | P at 1 GHz =                       | <b>930</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                                                                                                                          | 0.095                              | 0.029                              | 2080                               |
| 0.40                                                                                                                          | 0.138                              | 0.042                              | 1470                               |
| 0.60                                                                                                                          | 0.173                              | 0.053                              | 1201                               |
| 0.80                                                                                                                          | 0.203                              | 0.062                              | 1040                               |
| 1.00                                                                                                                          | 0.230                              | 0.070                              | 930                                |
| 1.20                                                                                                                          | 0.255                              | 0.078                              | 849                                |
| 1.40                                                                                                                          | 0.279                              | 0.085                              | 786                                |
| 1.60                                                                                                                          | 0.301                              | 0.092                              | 735                                |
| 1.80                                                                                                                          | 0.323                              | 0.098                              | 693                                |
| 2.00                                                                                                                          | 0.343                              | 0.105                              | 658                                |
| 4.00                                                                                                                          | 0.522                              | 0.159                              | 465                                |
| 6.00                                                                                                                          | 0.673                              | 0.205                              | 380                                |

HUBER+SUHNER is certified by ISO 9001, ISO 14001, ISO 45001, IATF 16949, AS/EN 9100 and ISO/TS 22163-IRIS. Waiver: Facts and figures herein are for information only and do not represent any warranty of any kind.  
DOCUMENT PIM-P680 / Date of publication: 10.12.2024 / uncontrolled copy