

Mini141

High performance/high pull strength, low loss microwave coaxial cable assembly

Product description

Mini141 is an enhanced, low loss version of the Minibend flexible coaxial cable assembly with increased phase stability and power handling capacity which is designed for use in low profile, internal, point-to-point interconnections between RF modules within communications systems. Mini141 replaces 0.141 inch custom semi-rigid cables with standard flexible cables providing 20 % lower attenuation and eliminating the need for predefined custom lengths and bend configurations. Mini141 provides you with a preassembled and tested high performance, cost-effective alternative in a variety of standard lengths.



Low profile assemblies

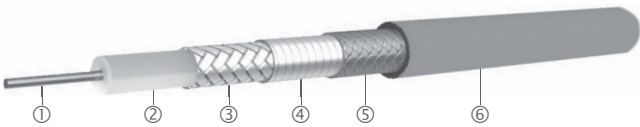
Product features

- Impedance 50 Ω
- Applicable up to 40 GHz
- Direct replacement for 0.141 inch semi-rigid cables
- Stock delivery on standard lengths
- Microporous dielectric for 20 % lower insertion loss, improved phase stability and higher power handling

Recommended connectors

| | |
|---------|---------------------------------------|
| mini141 | SMA, N, TNCA, SK |
| | Other connectors available on request |

Construction



| Cable | Inner conductor ① | Dielectric ② | Outer conductor ③ | Barrier ④ | Outer braid ⑤ | Jacket ⑥ | Outer diameter mm |
|-------|----------------------|------------------|----------------------|------------------------------|------------------|-------------|----------------------|
| 32022 | CuAg wire | PTFE microporous | CuAg flat wire braid | aluminium/ polyimide tape | stainless steel | FEP | 3.7 |

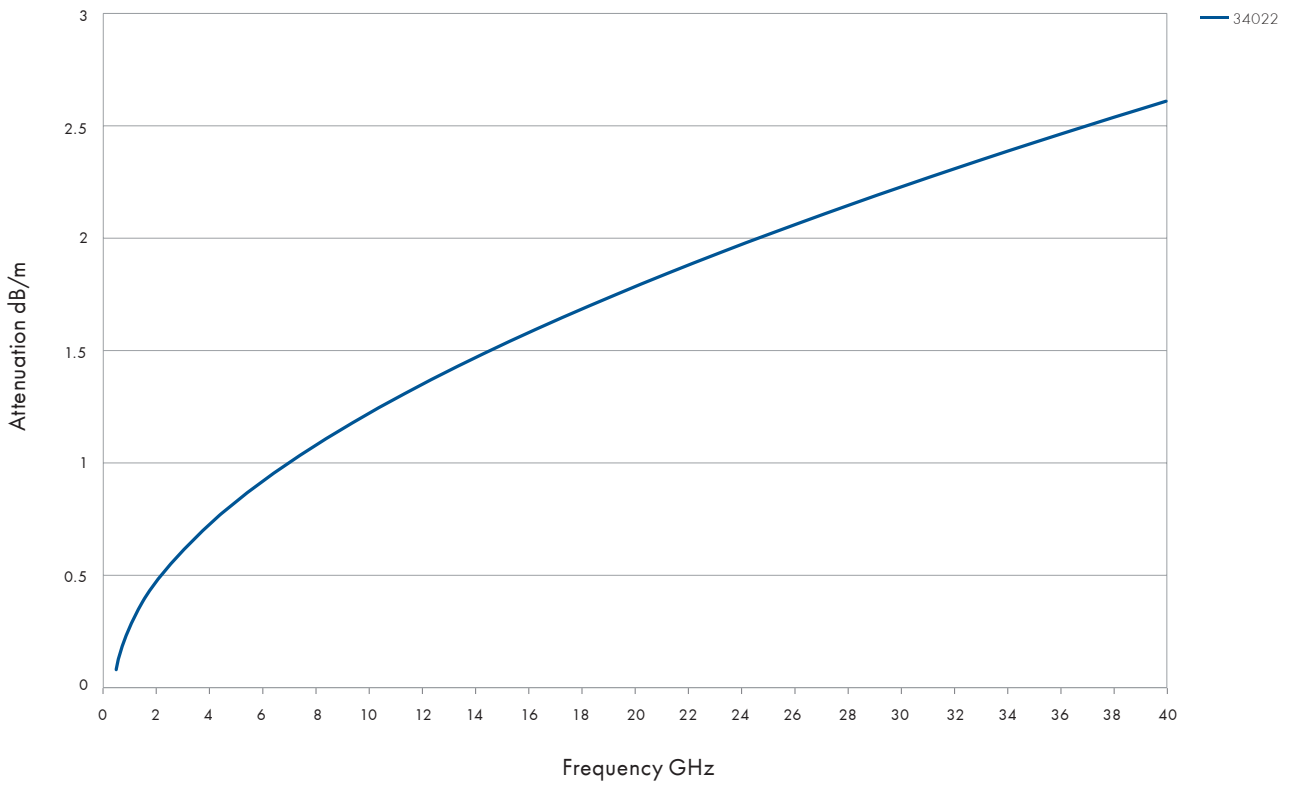
Technical data

| Cable | Operating frequency GHz | Velocity % | Weight g/m | Min. bending radius for ± 180° mm | Temperature range ° C |
|-------|----------------------------|---------------|---------------|---|--------------------------|
| 32022 | 40 | 76.3 | 31.3 | 8.40 | -55 to +200 |

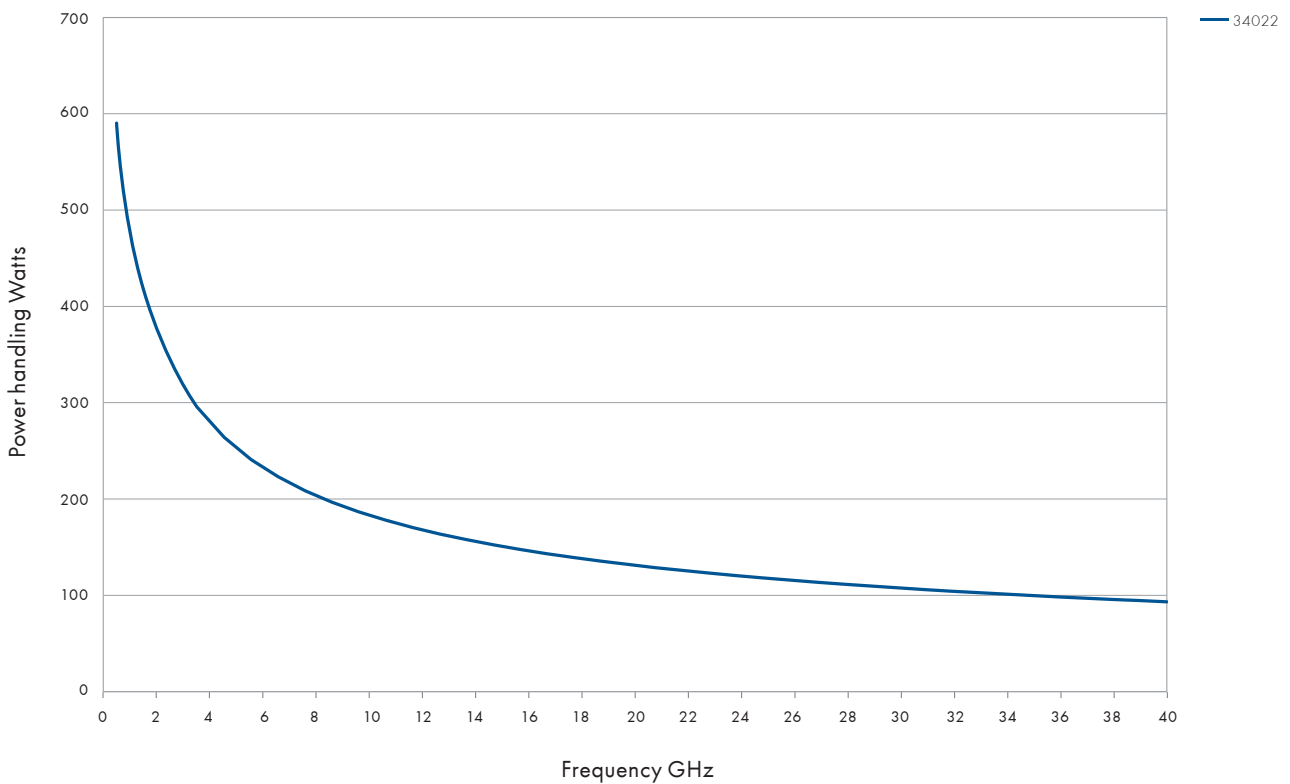
| Assembly | Mini141 | Mini141 K | Mini141 N | Mini141 T | Mini141 W |
|-------------|---------|-----------|-----------|-----------|-----------|
| Connector A | SMA (m) | SK (m) | N (m) | ATNC (m) | SMA (m) |
| Connector B | SMA (m) | SK (m) | N (m) | ATNC (m) | SMA (m) |

Mini141

Attenuation (nominal values at +25 °C ambient temperature)



Power handling (maximum values at 25 °C ambient temperature and sea level)



Mini141

Mini141 is a superior alternative to custom length, predefined bend configuration semi-rigid cable. Mini141 has a microporous dielectric for low loss and improved phase stability. Mini141 has precision stainless steel SMA plug connectors on each end.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connectors
- Automatically ruggedised by design



| Length mm | Mini141 | Item no. |
|--------------|------------|----------|
| 127 | mini141-5 | 80336857 |
| 152.4 | mini141-6 | 80336872 |
| 177.8 | mini141-7 | 80336884 |
| 203.2 | mini141-8 | 80336896 |
| 228.6 | mini141-9 | 80336905 |
| 254 | mini141-10 | 80336790 |
| 279.4 | mini141-11 | 80336793 |
| 304.8 | mini141-12 | 80336797 |
| 330.2 | mini141-13 | 80336802 |
| 355.6 | mini141-14 | 80336804 |
| 381 | mini141-15 | 80336807 |
| 406.4 | mini141-16 | 80336810 |

Mini141 K

Mini141 K is the 40 GHz version of the Mini141. Mini141 K replaces custom length, predefined bend configuration 0.141 inch Semi-rigid cable with truly flexible, low loss microporous dielectric, phase stable coax cable for use as interconnections between RF modules in microwave systems.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connectors
- Automatically ruggedised by design



| Length mm | Mini141 K | Item no. |
|--------------|--------------|----------|
| 127 | mini141 K-5 | 80336731 |
| 152.4 | mini141 K-6 | 80336732 |
| 177.8 | mini141 K-7 | 80336733 |
| 203.2 | mini141 K-8 | 80336734 |
| 228.6 | mini141 K-9 | 80336735 |
| 254 | mini141 K-10 | 80336714 |
| 279.4 | mini141 K-11 | 80362851 |
| 304.8 | mini141 K-12 | 80336716 |
| 330.2 | mini141 K-13 | 80336717 |
| 355.6 | mini141 K-14 | 80336718 |
| 381 | mini141 K-15 | 80362909 |
| 406.4 | mini141 K-16 | 80336719 |

Mini141 N

Mini141 N offers all of the features and benefits of the Mini141 but with N plug connections. Mini141 N replaces custom length, predefined bend configuration 0.141 inch semi-rigid cable with truly flexible, low loss, phase stable microporous dielectric coax cable in standard lengths.

- Frequency range up to 18 GHz
- Precision stainless steel N plug connectors
- Automatically ruggedised by design



| Length mm | Mini141 N | Item no. |
|--------------|--------------|----------|
| 127 | mini141 N-5 | 80336745 |
| 152.4 | mini141 N-6 | 80336747 |
| 177.8 | mini141 N-7 | 80365109 |
| 203.2 | mini141 N-8 | 80336748 |
| 228.6 | mini141 N-9 | 80366643 |
| 254 | mini141 N-10 | 80363841 |
| 279.4 | mini141 N-11 | 80362163 |
| 304.8 | mini141 N-12 | 80336736 |
| 330.2 | mini141 N-13 | 80366110 |
| 355.6 | mini141 N-14 | 80336737 |
| 381 | mini141 N-15 | 80361505 |
| 406.4 | mini141 N-16 | 80336738 |

Mini141 T

Mini141 T offers all of the features and benefits of the Mini141 but with ATNC plug connections. Mini141 T replaces custom length, predefined bend configuration 0.141 inch semi-rigid cable with truly flexible, low loss, phase stable microporous dielectric coax cable in standard lengths.

- Frequency range up to 18.5 GHz
- Precision stainless steel ATNC plug connectors compatible with TNC or TNC-A connectors per MIL-STD-348
- Automatically ruggedised by design



| Length mm | Mini141 T | Item no. |
|--------------|--------------|----------|
| 127 | mini141 T-5 | 80336751 |
| 152.4 | mini141 T-6 | 80336752 |
| 177.8 | mini141 T-7 | 80366192 |
| 203.2 | mini141 T-8 | 80336753 |
| 228.6 | mini141 T-9 | 80336912 |
| 254 | mini141 T-10 | 80363433 |
| 279.4 | mini141 T-11 | 80370800 |
| 304.8 | mini141 T-12 | 80336911 |
| 330.2 | mini141 T-13 | 80366954 |
| 355.6 | mini141 T-14 | 80370801 |
| 381 | mini141 T-15 | 80370802 |
| 406.4 | mini141 T-16 | 80365426 |

Mini141 W

Mini141 W is the "all weather" version of the Mini141 for environments with high humidity and moisture. Mini141 W meets moisture-resistance requirements of MIL-STD-202, method 106. Mini141 W replaces custom length predefined bend configuration 0.141 inch semi-rigid cable with truly flexible coax cable for use in external or internal point-to-point interconnections between modules in microwave systems.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connectors
- Automatically ruggedised and weatherproof by design



| Length mm | Mini141 W | Item no. |
|-----------|--------------|----------|
| 127 | mini141 W-5 | 80336781 |
| 152.4 | mini141 W-6 | 80336784 |
| 177.8 | mini141 W-7 | 80362734 |
| 203.2 | mini141 W-8 | 80336785 |
| 228.6 | mini141 W-9 | 80336786 |
| 254 | mini141 W-10 | 80336765 |
| 279.4 | mini141 W-11 | 80336766 |
| 304.8 | mini141 W-12 | 80336767 |
| 330.2 | mini141 W-13 | 80336768 |
| 355.6 | mini141 W-14 | 80336769 |
| 381 | mini141 W-15 | 80362735 |
| 406.4 | mini141 W-16 | 80336772 |