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.



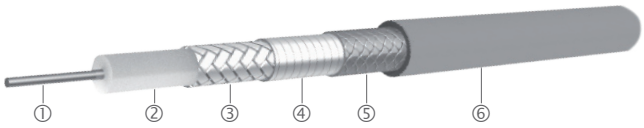
Product features

- 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

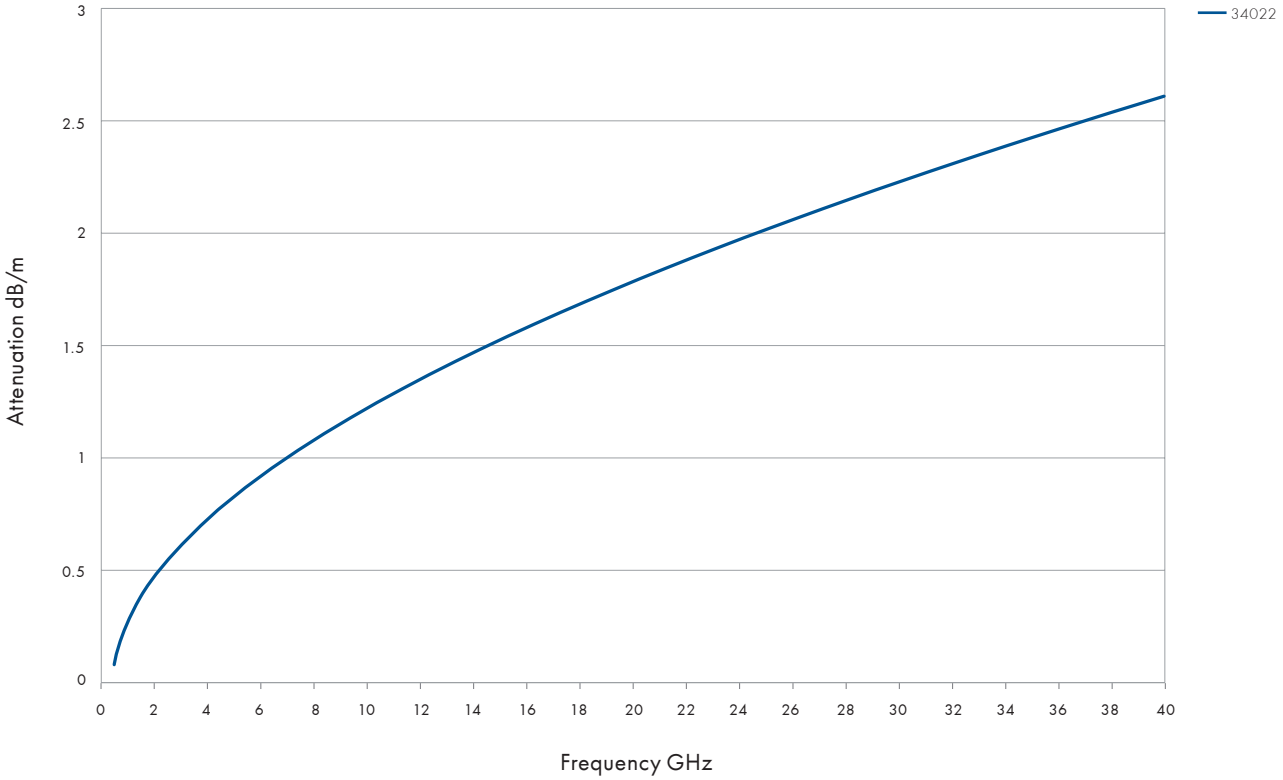
Cable	Operating frequency	Velocity	Weight	Min. bending radius for ± 180°	Temperature range
	GHz	%	g /m	mm	° C
32022	40	76.3	31.3	8.40	−55 to +200

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)

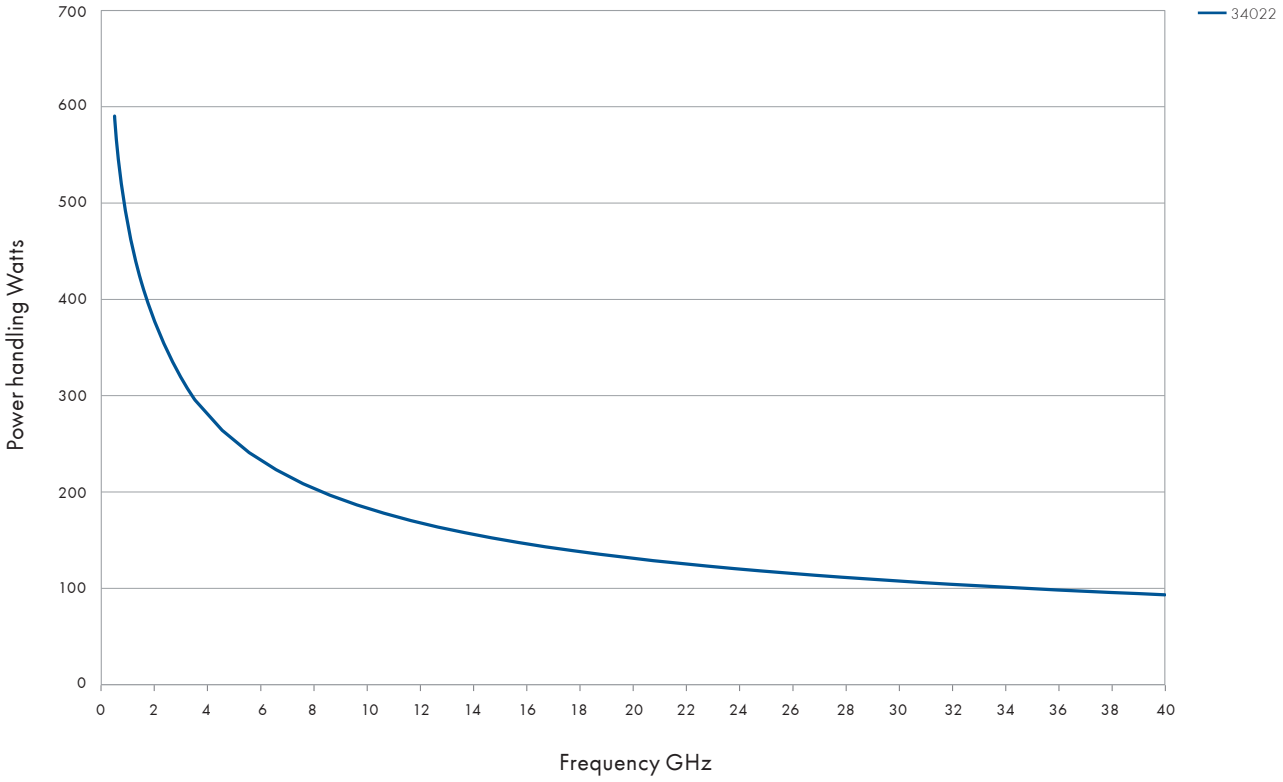
Abbreviations see page 180

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	Mini141	Item no.
mm		
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	Mini141 K	Item no.
mm		
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

Abbreviations see page 180

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	Mini141 N	Item no.
mm		
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	Mini141 T	Item no.
mm		
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	Mini141 W	Item no.
mm		
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

Abbreviations see page 180