Microbend

High performance/high pull strength microwave coaxial cable assembly

Product description

Microbend assemblies provide you with a standard preassembled and tested high performance, cost-effective truly flexible alternative to 0.047 inch custom semi-rigid cable assemblies, eliminating the need for predefined custom lengths and bend configurations. Microbend features include 35 % lower loss than 0.047 inch semi-rigid cable, a minimum bend radius of 1.52 mm (0.060 inch) and triple shielding for high isolation. Microbend assemblies are available with a wide range of connector interfaces. All Microbend assemblies are available only in a ruggedised version.



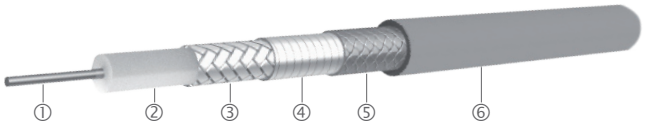
Product features

- Impedance 50 Ω
- Applicable up to 67 GHz
- Stock delivery on standard lengths
- 35 % lower insertion loss than 0.047 inch semi-rigid cables

Recommended connectors

Microbend	SMA, SSMA, SK, SMP, SMPM, SMPM-T, 1.85 mm
	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
32041	CuAg wire	PTFE	CuAg flat wire braid	aluminium/ polyimide tape	stainless steel	FEP	2.0

Technical data

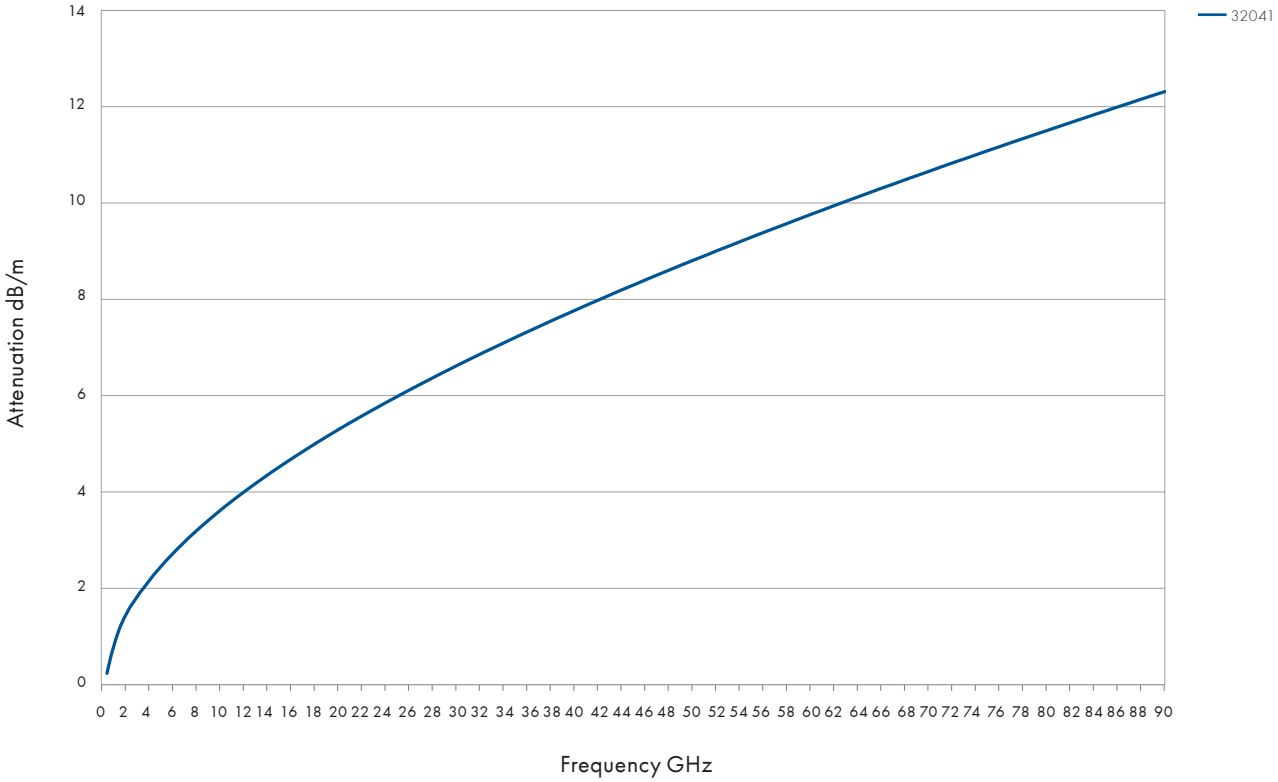
Cable	Operating frequency	Velocity	Weight	Min. bending radius for ± 180°	Temperature range
	GHz	%	g /m	mm	° C
32041	90	70.3	11.9	1.50	–55 to +200

Assembly	Microbend R	Microbend AR	Microbend KR	Microbend KMR	Microbend KMTR	Microbend KV	Microbend MR
Connector A	SMA (m)	SSMA (m)	SK (m)	SK (m)	SK (m)	SK (m)	SMA (m)
Connector B	SMA (m)	SSMA (m)	SK (m)	SMPM (f)	SMPM -T(f)	1.85 mm (m) gold plated BeCu	SMPM (f)

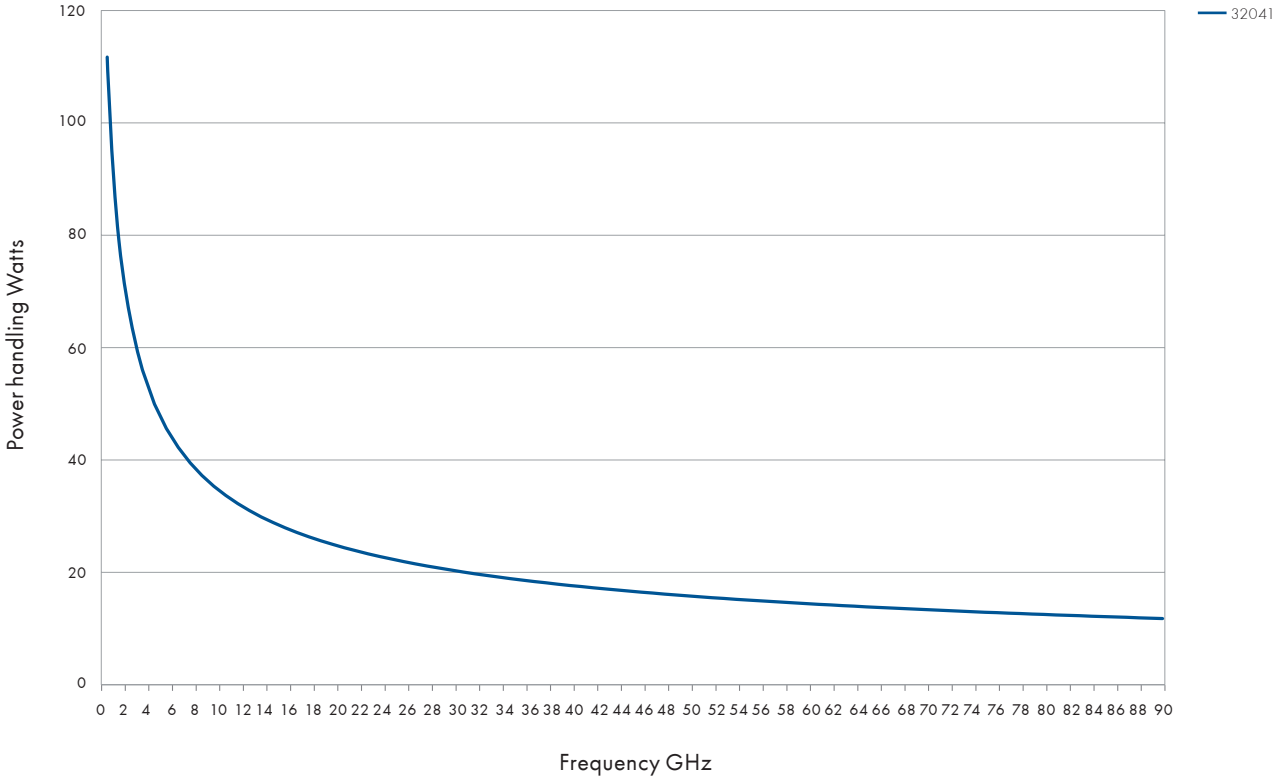
Assembly	Microbend 2MR	Microbend MTR	Microbend 2MTR	Microbend MVR	Microbend SR	Microbend 2SR	Microbend V
Connector A	SMPM (f)	SMA (m)	SMPM -T(f)	SMPM (f)	SMA (m)	SMP (f)	1.85 mm (m) gold plated BeCu
Connector B	SMPM (f)	SMPM -T(f)	SMPM -T(f)	1.85 mm (m) gold plated BeCu	SMP (f)	SMP (f)	1.85 mm (m) gold plated BeCu

Microbend

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



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

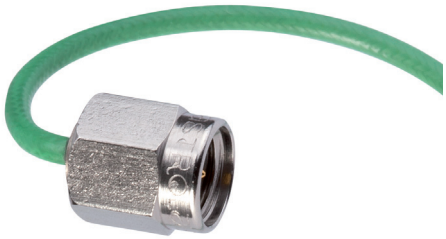


Abbreviations see page 180

Microbend R

Microbend R eliminates the need for predefined custom lengths and bend configurations. Microbend R was designed for use as internal point-to-point interconnections between modules in microwave and fiber optic switching systems. Microbend R features include lower loss than 0.047 inch semi-rigid cable and a minimum bend radius of 1.52 mm (0.060 inch).

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



Lengt mm	Microbend R	Item no.
63.5	microbend R-2.5	80336652
76.2	microbend R-3	80336654
88.9	microbend R-3.5	80336655
101.6	microbend R-4	80336658
114.3	microbend R-4.5	80336659
127	microbend R-5	80336662
139.7	microbend R-5.5	80336664
152.4	microbend R-6	80336665
165.1	microbend R-6.5	80363961
177.8	microbend R-7	80336667
203.2	microbend R-8	80336668
228.6	microbend R-9	80336669
254	microbend R-10	80336646
279.4	microbend R-11	80336648
304.8	microbend R-12	80336649

Microbend AR

Microbend AR is the SSMA plug version of the of the Microbend. Microbend AR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible coax cable in standard lengths.

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



Length mm	Microbend AR	Item no.
63.5	microbend AR-2.5	80370830
76.2	microbend AR-3	80370831
88.9	microbend AR-3.5	80370832
101.6	microbend AR-4	80336531
114.3	microbend AR-4.5	80370833
127	microbend AR-5	80363838
139.7	microbend AR-5.5	80370834
152.4	microbend AR-6	80336532
165.1	microbend AR-6.5	80370835
177.8	microbend AR-7	80370836
203.2	microbend AR-8	80336533
228.6	microbend AR-9	80370837
254	microbend AR-10	80336529
279.4	microbend AR-11	80370838
304.8	microbend AR-12	80362731

Microbend KR

Microbend KR offers all the benefits of the Microbend cable assembly but with a solderless SK plug connector on each end for performance up to 40 GHz. Microbend KR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with standard length, truly flexible coax cable for use as internal interconnections between RF modules in communications and high bandwidth switching systems.

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



Length	Microbend KR	Item no.
mm		
63.5	microbend KR-2.5	80336568
76.2	microbend KR-3	80336570
88.9	microbend KR-3.5	80336571
101.6	microbend KR-4	80336573
114.3	microbend KR-4.5	80360390
127	microbend KR-5	80336574
139.7	microbend KR-5.5	80336575
152.4	microbend KR-6	80336576
165.1	microbend KR-6.5	80367544
177.8	microbend KR-7	80336578
203.2	microbend KR-8	80336579
228.6	microbend KR-9	80336580
254	microbend KR-10	80336562
279.4	microbend KR-11	80336563
304.8	microbend KR-12	80336564

Microbend KMR

Microbend KMR offers all the benefits of the Microbend but with a solderless SK plug on one end and an SMPM female connector compliant with MIL-STD-348 on the other. Microbend KMR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with standard length truly flexible coax cable.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



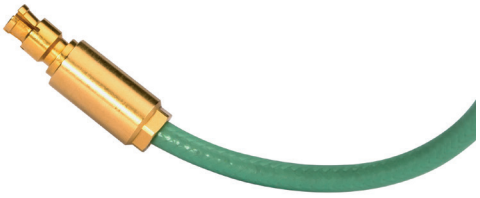
Length	Microbend KMR	Item no.
mm		
63.5	microbend KMR-2.5	80336550
76.2	microbend KMR-3	80336552
88.9	microbend KMR-3.5	80336553
101.6	microbend KMR-4	80336554
114.3	microbend KMR-4.5	80336555
127	microbend KMR-5	80336556
139.7	microbend KMR-5.5	80336557
152.4	microbend KMR-6	80336558
165.1	microbend KMR-6.5	80362862
177.8	microbend KMR-7	80336559
203.2	microbend KMR-8	80336560
228.6	microbend KMR-9	80336561
254	microbend KMR-10	80336545
279.4	microbend KMR-11	80336546
304.8	microbend KMR-12	80336547

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Microbend KMTR

Microbend KMTR offers all the benefits of the Microbend in a 40 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on one end and a SK plug connector on the other. Microbend KMTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 40 GHz
- Precision stainless steel SK plug connector
- Precision SMPM-T female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length mm	Microbend KMTR	Item no.
63.5	microbend KMTR-2.5	80370885
76.2	microbend KMTR-3	80370886
88.9	microbend KMTR-3.5	80370887
101.6	microbend KMTR-4	80370312
114.3	microbend KMTR-4.5	80370888
127	microbend KMTR-5	80371852
139.7	microbend KMTR-5.5	80370889
152.4	microbend KMTR-6	80362186
165.1	microbend KMTR-6.5	80370890
177.8	microbend KMTR-7	80370891
203.2	microbend KMTR-8	80365259
228.6	microbend KMTR-9	80370892
254	microbend KMTR-10	80369837
279.4	microbend KMTR-11	80370893
304.8	microbend KMTR-12	80362144

Microbend KV

Microbend KV offers all the benefits of the Microbend in a 40 GHz, high bandwidth cable assembly with an SK plug connector on one end and a 1.85 mm plug connector containing a gold plated BeCu contact for those applications that require repeated mates/demates of the interface, on the other. Microbend KV replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching systems.

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



Length mm	Microbend KV	Item no.
63.5	microbend KV-2.5	80336581
76.2	microbend KV-3	80370869
88.9	microbend KV-3.5	80370870
101.6	microbend KV-4	80363709
114.3	microbend KV-4.5	80370871
127	microbend KV-5	80370872
139.7	microbend KV-5.5	80370873
152.4	microbend KV-6	80336582
165.1	microbend KV-6.5	80370874
177.8	microbend KV-7	80370875
203.2	microbend KV-8	80370876
228.6	microbend KV-9	80370877
254	microbend KV-10	80370878
279.4	microbend KV-11	80370879
304.8	microbend KV-12	80369706

Microbend MR

Microbend MR offers the benefits of the Microbend but with an SMA plug connector on one end and an SMPM female connector compliant with MIL-STD-348 on the other. Microbend MR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length cable.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	Microbend MR	Item no.
mm		
63.5	microbend MR-2.5	80336593
76.2	microbend MR-3	80336595
88.9	microbend MR-3.5	80336596
101.6	microbend MR-4	80336598
114.3	microbend MR-4.5	80370842
127	microbend MR-5	80336599
139.7	microbend MR-5.5	80336600
152.4	microbend MR-6	80336603
165.1	microbend MR-6.5	80370843
177.8	microbend MR-7	80365284
203.2	microbend MR-8	80336605
228.6	microbend MR-9	80365285
254	microbend MR-10	80360212
279.4	microbend MR-11	80336588
304.8	microbend MR-12	80336590

Microbend 2MR

Microbend 2MR offers all the benefits of the Microbend but with SMPM female connectors on each end that are fully compliant with MIL-STD-348. Microbend 2MR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible coax cable in standard lengths.

- Frequency range up to 65 GHz
- Precision SMPM female connectors mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



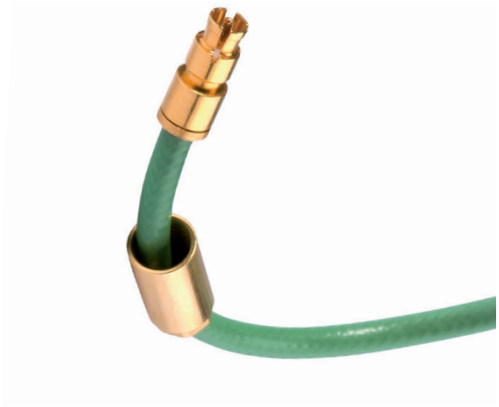
Length	Microbend 2MR	Item no.
mm		
63.5	microbend 2MR-2.5	80336485
76.2	microbend 2MR-3	80336490
88.9	microbend 2MR-3.5	80362597
101.6	microbend 2MR-4	80336496
114.3	microbend 2MR-4.5	80370033
127	microbend 2MR-5	80336500
139.7	microbend 2MR-5.5	80370844
152.4	microbend 2MR-6	80336501
165.1	microbend 2MR-6.5	80370845
177.8	microbend 2MR-7	80362973
203.2	microbend 2MR-8	80336507
228.6	microbend 2MR-9	80336509
254	microbend 2MR-10	80336477
279.4	microbend 2MR-11	80336478
304.8	microbend 2MR-12	80336480

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Microbend MTR

Microbend MTR offers all the benefits of the Microbend in a 26.5 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on one end and a SMA plug connector on the other. Microbend MTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMPM-T female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	Microbend MTR	Item no.
mm		
63.5	microbend MTR-2.5	80370846
76.2	microbend MTR-3	80371995
88.9	microbend MTR-3.5	80370847
101.6	microbend MTR-4	80366736
114.3	microbend MTR-4.5	80370848
127	microbend MTR-5	80366725
139.7	microbend MTR-5.5	80370849
152.4	microbend MTR-6	80361103
165.1	microbend MTR-6.5	80370850
177.8	microbend MTR-7	80366726
203.2	microbend MTR-8	80396610
228.6	microbend MTR-9	80362047
254	microbend MTR-10	80366737
279.4	microbend MTR-11	80370851
304.8	microbend MTR-12	80362145

Microbend 2MTR

Microbend 2MTR offers all the benefits of the Microbend MTR in a 40 GHz, high bandwidth cable assembly that features an SMPM-T female connector compliant with MIL-STD-348 on each side. Microbend 2MTR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching. It is also used extensively in space applications.

- Frequency range up to 65 GHz
- Precision SMPM-T female connectors mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	Microbend 2MTR	Item no.
mm		
63.5	microbend 2MTR-2.5	80370855
76.2	microbend 2MTR-3	80366641
88.9	microbend 2MTR-3.5	80367802
101.6	microbend 2MTR-4	80370856
114.3	microbend 2MTR-4.5	80366674
127	microbend 2MTR-5	80367803
139.7	microbend 2MTR-5.5	80370857
152.4	microbend 2MTR-6	80365945
165.1	microbend 2MTR-6.5	80370858
177.8	microbend 2MTR-7	80367804
203.2	microbend 2MTR-8	80360654
228.6	microbend 2MTR-9	80367805
254	microbend 2MTR-10	80367172
279.4	microbend 2MTR-11	80370859
304.8	microbend 2MTR-12	80362560

Microbend MVR

Microbend MVR offers all the benefits of the Microbend in a 65 GHz, high bandwidth cable assembly that features an SMPM female connector compliant with MIL-STD-348 on one end and a 1.85 mm plug connector containing a gold plated BeCu contact for those applications that require repeated mates/demates of the interface on the other. Microbend MVR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length coax cable for use as internal interconnections between modules in microwave and optical fiber switching systems.

- Frequency range up to 65 GHz
- 1.85 mm plug connector
- Precision SMPM female connector mateable with Corning Gilbert GPPO®
- Automatically ruggedised by design



Length	Microbend MVR	Item no.
mm		
63.5	microbend MVR-2.5	80336620
76.2	microbend MVR-3	80336623
88.9	microbend MVR-3.5	80336626
101.6	microbend MVR-4	80336633
114.3	microbend MVR-4.5	80370862
127	microbend MVR-5	80336638
139.7	microbend MVR-5.5	80370863
152.4	microbend MVR-6	80336640
165.1	microbend MVR-6.5	80370864
177.8	microbend MVR-7	80336641
203.2	microbend MVR-8	80336643
228.6	microbend MVR-9	80336645
254	microbend MVR-10	80336613
279.4	microbend MVR-11	80370865
304.8	microbend MVR-12	80336614

Microbend SR

Microbend SR offers the benefits of the standard Microbend with an SMA plug connector on one end and a DSCC and MIL-STD-348 compliant SMP female connector on the other. Microbend SR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, cost-effective, standard length coax cables for use as internal interconnections between RF modules of communications systems.

- Frequency range up to 26.5 GHz
- Precision stainless steel SMA plug connector
- Precision SMP female connector mateable with Corning Gilbert GPO®
- Automatically ruggedised by design



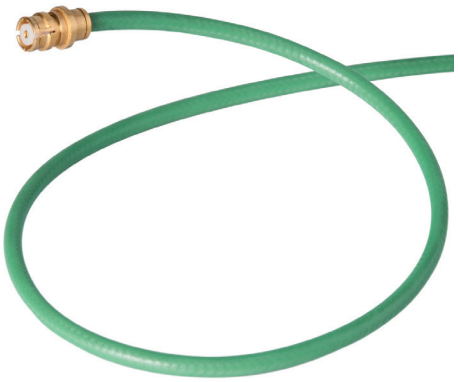
Length	Microbend SR	Item no.
mm		
63.5	microbend SR-2.5	80336674
76.2	microbend SR-3	80366686
88.9	microbend SR-3.5	80336676
101.6	microbend SR-4	80336677
114.3	microbend SR-4.5	80363639
127	microbend SR-5	80336679
139.7	microbend SR-5.5	80363701
152.4	microbend SR-6	80336681
165.1	microbend SR-6.5	80366676
177.8	microbend SR-7	80336684
203.2	microbend SR-8	80336685
228.6	microbend SR-9	80336686
254	microbend SR-10	80370899
279.4	microbend SR-11	80370900
304.8	microbend SR-12	80336671

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Microbend 2SR

Microbend 2SR offers all of the benefits of the standard Microbend but with DSCC and MIL-STD-348 compliant SMP female connectors on each end. Microbend 2SR replaces custom length, predefined bend configuration 0.047 inch semi-rigid cable with truly flexible, standard length, cost-effective coax cable for use as internal interconnections between RF modules in communications systems.

- Frequency range up to 40 GHz
- Precision SMP female connectors mateable with Corning Gilbert GPO®
- Automatically ruggedised by design



Length	Microbend 2SR	Item no.
mm		
63.5	microbend 2SR-2.5	80336515
76.2	microbend 2SR-3	80336518
88.9	microbend 2SR-3.5	80365453
101.6	microbend 2SR-4	80336521
114.3	microbend 2SR-4.5	80366525
127	microbend 2SR-5	80336522
139.7	microbend 2SR-5.5	80336523
152.4	microbend 2SR-6	80336524
165.1	microbend 2SR-6.5	80365939
177.8	microbend 2SR-7	80365452
203.2	microbend 2SR-8	80336525
228.6	microbend 2SR-9	80365455
254	microbend 2SR-10	80363819
279.4	microbend 2SR-11	80365454
304.8	microbend 2SR-12	80362685

Microbend V

Microbend V is the millimeter wave version of the Microbend and was designed for use in high-speed (40 Gb/sec.) switching applications such as in fiber optic communications. Microbend V has precision 1.85 mm plug connectors on each end that contain a gold plated BeCu contact for applications that require repeated mates/demates of the interface. Microbend V replaces custom length, predefined bend configuration 0.047 inch semi-rigid cables with truly flexible, cost-effective, standard lengths.

- Frequency range up to 65 GHz
- Precision 1.85 mm compatible plug connectors
- Automatically ruggedised by design



Length	Microbend V	Item no.
mm		
63.5	microbend V-2.5	80336690
76.2	microbend V-3	80336692
88.9	microbend V-3.5	80336693
101.6	microbend V-4	80336695
114.3	microbend V-4.5	80336696
127	microbend V-5	80366545
139.7	microbend V-5.5	80365644
152.4	microbend V-6	80336700
165.1	microbend V-6.5	80370906
177.8	microbend V-7	80370907
203.2	microbend V-8	80366953
228.6	microbend V-9	80365792
254	microbend V-10	80336689
279.4	microbend V-11	80370908
304.8	microbend V-12	80362488