

NEW.

Now including,
WSMP, 1.85mm, 2.92mm
and mini SMP
cable assemblies!

Rosenberger

Rosenberger® RFlex® Cables

PERFORMANCE AND VALUE FOR YOUR
DAY-TO-DAY TEST APPLICATIONS.

ROSENBERGER NORTH AMERICA

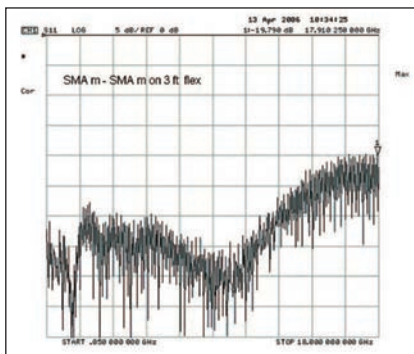


Rosenberger® RFlex® Cables



Features and Benefits

- High performance, low cost microwave interconnects
- Excellent performance over a broad frequency range: -20dB return loss (typ.) at DC to 18 GHz (SMA.m-SMA.m)
- Rosenberger's superior shielded cable is cost effective and allows relative shielding of -100 dB (min)
- RoHS compliant
- Rosenberger connectors feature gold-plated center contacts, passivated stainless steel coupling nuts, and PTFE dielectric
- Unique over-molded strain relief is exceptionally rugged and durable
- Temperature range: -55°C to +125°C
- Rosenberger RTK Flex 402 cable provides maximum flexibility

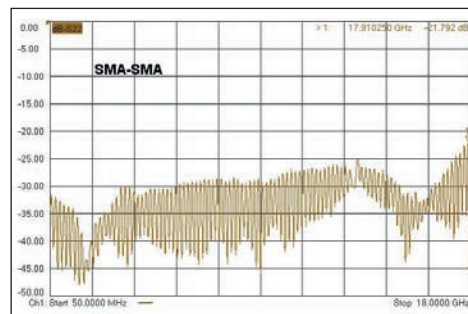
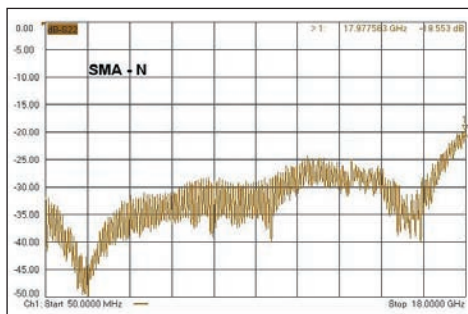
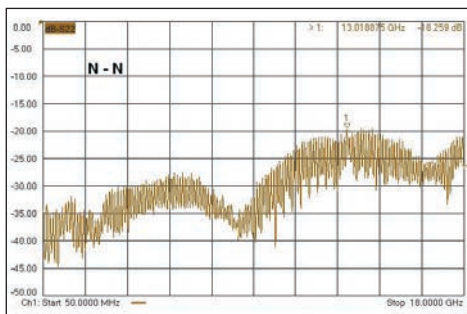


	OAL in FT.	Part # RoHS Compliant	IL (dB) Typ NOTE 1	RL (dB) Typ NOTE 2
SMAM-SMAM	1.0	72W-32S1-32S1-00305	0.6	28
	1.5	72W-32S1-32S1-00457	0.8	28
	2.0	72W-32S1-32S1-00610	1.0	28
	3.0	72W-32S1-32S1-00915	1.5	28
	4.0	72W-32S1-32S1-01220	1.7	28
	6.0	72W-32S1-32S1-01830	3.0	28
Nm-SMAM	2.0	72W-32S1-53S1-00610	1.0	26
	3.0	72W-32S1-53S1-00915	1.5	26
	4.0	72W-32S1-53S1-01220	1.7	26
	6.0	72W-32S1-53S1-01830	3.0	26
	15	72W-32S1-53S1-04570	7.3	26
Nm-Nm	2.0	72W-53S1-53S1-00610	1.0	26
	3.0	72W-53S1-53S1-00915	1.5	26
	6.0	72W-53S1-53S1-01830	3.0	26
	15	72W-53S1-53S1-04750	7.3	26
	20	72W-53S1-53S1-06100	9.4	26
	25	72W-53S1-53S1-07620	11.7	26
SMAf-SMAM	3.0	72W-32S1-32K1-00915	1.5	25
SMAf-Nm	2.0	72W-32K1-53S1-00610	1.0	25
	3.0	72W-32K1-53S1-00915	1.5	25
	6.0	72W-32K1-53S1-01830	3.0	25
SMAM-TNCm	1.5	72W-32S1-56S1-00457	0.8	18
	2.0	72W-32S1-56S1-00610	1.0	18
	3.0	72W-32S1-56S1-00915	1.5	18
	4.0	72W-32S1-56S1-01220	1.7	18
	6.0	72W-32S1-56S1-01830	3.0	18

Note 1 – Insertion Loss in dB (Typ.) at mid-band.

Note 2 – Return Loss in dB (Typ.) at mid-band.

Rosenberger® RFlex® Cables



ELECTRICAL SPECIFICATIONS-RTK Flex 402

IMPEDANCE, NOMINAL	50 OHMS
OPERATING FREQUENCY	(GHz) 18
CAPACITANCE NOMINAL	29.4 pf/ft
VELOCITY OF PROPAGATION, NOMINAL	70.0 %
RELATIVE SHIELDING	-110.0 dB MIN.
INSULATION RESISTANCE	1000 MEGOHMS MIN.
DIELECTRIC WITHSTANDING VOLTAGE	1000 VRMS MIN.
ELECTRICAL DELAY, NOMINAL	1.43 ns/ft or 120 ps/INCH
PULSE RF POWER	1000 WATTS MAX

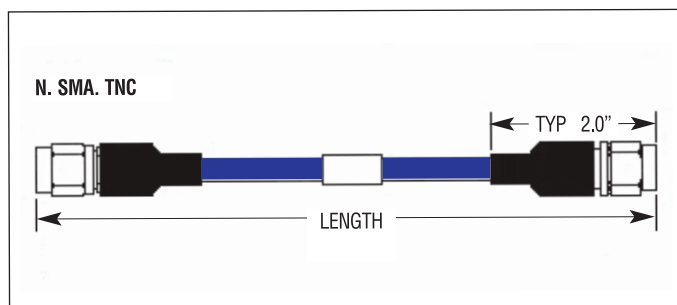
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)

FREQUENCY (GHz)	1	2	4	8	12	18
MAX. CW (WATTS)	290	195	154	72	60	48
PHASE STABILITY (DEG)	0.50	1.00	2.00	5.00	8.00	10.00
LOSS STABILITY (dB)*	0.05	0.05	0.10	0.20	0.30	0.40

*CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS

MECHANICAL SPECIFICATIONS RTK Flex 402

CABLE MAX. DIAMETER	0.163 INCHES	4.14 mm
MIN. ONE TIME BEND RADIUS	1.00 INCHES	2.54 cm
PREFERRED BEND RADIUS	4.00 INCHES	10.20 cm
CONNECTOR RETENTION	25 POUNDS MIN.	111 N MIN
TEMPERATURE RANGE	-55 to +125 DEGREES C	
MATING TORQUE	7-10 INCH POUNDS	.8-1.13 N-m
CONNECTOR INTERFACE	MIL-STD-348 HYBRID	



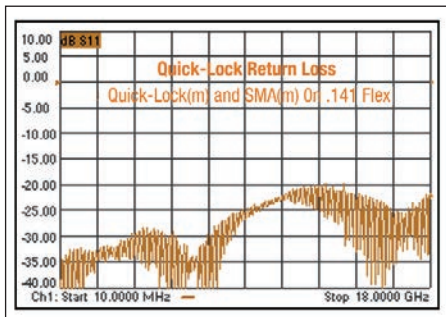
MATERIALS AND FINISHES RTK Flex 402

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET	FEP	BLUE
MARKER	MIL-I-23053	BLACK or WHITE
BOOTS	ATUM	BLACK
CONTACTS	Brass or BeCu	GOLD PLATED
INSULATORS	PTFE	NONE
CONNECTOR BODIES	Brass or BeCu	GOLD PLATED
CONNECTOR NUTS	STAINLESS STEEL	PASSIVATED
GASKET	ZZ-R-765 SILICON RUBBER	

PART NUMBER	CONNECTOR TYPE	LENGTH INCHES	(+ -) LENGTH INCHES	LENGTH cm	(+ -) LENGTH mm	TYP RETURN LOSS IN dB AT FREQ. (IN GHz)			TYP INSERTION LOSS IN dB AT FREQ. (IN GHz)		
						UP TO 2	UP TO 8	UP TO 18	UP TO 2	UP TO 8	UP TO 18
72W-32S1-32S1-00305	SMA M-SMA M	12	0.25	30.5	6.35	30	27	18	0.20	0.54	0.90
72W-32S1-32S1-00457	SMA M-SMA M	18	0.25	45.7	6.35	30	27	18	0.34	0.74	1.14
72W-32S1-32S1-00610	SMA M-SMA M	24	0.25	61.0	6.35	30	27	18	0.45	0.97	1.51
72W-32S1-32S1-00915	SMA M-SMA M	36	0.50	91.5	12.70	30	27	18	0.63	1.37	2.13
72W-32S1-32S1-01220	SMA M-SMA M	48	0.50	122.0	12.70	30	27	18	0.81	1.77	2.75
72W-32S1-32S1-01830	SMA M-SMA M	72	0.75	183.0	19.05	30	27	18	1.18	2.56	3.98
72W-32S1-53S1-00610	N M-SMA M	24	0.25	61.0	6.35	28	24	17	0.49	0.92	1.37
72W-32S1-53S1-00915	N M-SMA M	36	0.50	91.5	12.70	28	24	17	0.67	1.32	1.99
72W-32S1-53S1-01220	N M-SMA M	48	0.50	122.0	12.70	28	24	17	0.86	1.71	2.61
72W-53S1-53S1-01830	N M-SMA M	72	0.75	183.0	19.05	28	24	17	1.22	2.44	3.72
72W-53S1-53S1-04750	N M-SMA M	180	1.50	457.0	38.10	28	24	17	3.66	7.32	11.17
72W-53S1-53S1-06100	N M-N M	24	0.25	61.0	6.35	28	24	17	0.47	0.90	1.35
72W-32S1-32K1-00915	N M-N M	36	0.50	91.5	12.70	28	24	17	0.65	1.29	1.97
72W-32K1-53S1-01830	N M-N M	72	0.75	183.0	19.05	28	24	17	0.83	1.69	3.99
72W-53S1-53S1-04750	N M-N M	180	1.50	457.0	38.10	28	24	17	3.12	6.33	9.71
72W-53S1-53S1-06100	N M-N M	240	2.00	610.0	50.80	28	24	17	4.17	8.44	12.95
72W-53S1-53S1-07620	N M-N M	280	2.50	762.0	63.50	28	24	17	4.87	9.85	15.11
72W-32S1-32K1-00915	SMA F-SMA M	36	0.50	91.5	12.70	28	24	18	0.69	1.40	2.20
72W-32K1-53S1-00610	SMA F-N M	24	0.25	61.0	6.35	28	24	17	0.48	0.98	1.63
72W-32K1-53S1-00915	SMA F-N M	36	0.50	91.5	12.70	28	24	17	0.71	1.38	2.19
72W-32K1-53S1-01830	SMA F-N M	72	0.75	83.0	19.05	28	24	17	1.21	2.65	4.05
72W-32S1-56S1-00457	SMA M-TNC M	18	0.25	45.7	6.35	23	18	15	0.37	0.69	1.10
72W-32S1-56S1-00610	SMA M-TNC M	24	0.25	61.0	6.35	23	18	15	0.49	0.92	1.48
72W-32S1-56S1-00915	SMA M-TNC M	36	0.50	91.5	12.70	23	18	15	0.67	1.32	2.18
72W-32S1-56S1-01220	SMA M-TNC M	48	0.50	122.0	12.70	23	18	15	0.89	1.71	2.80
72W-32S1-56S1-01830	SMA M-TNC M	72	0.75	183.0	9.05	23	8	15	1.22	2.45	3.98

Rosenberger® RFlex® Cables – Quick Lock™

Rosenberger Test Cables: One trusted source for performance and value. Featuring NEW QUICK-LOCK™ and PUSH-ON™ SMA connectors.



Quick-Lock™ Return Loss

	Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2
SMAm-to	72W-32S1-32QS1-00305	1.5	0.8	25
SMA Quick-Lock™	72W-32S1-32QS1-00457	2.0	1.0	25
RTK Flex 402	72W-32S1-32QS1-00610	3.0	1.5	25
	72W-32S1-32QS1-01220	4.0	1.7	25
	72W-32S1-32QS1-01830	6.0	3.0	25

Note 1 – Insertion Loss in dB (Typ.) at mid-band.

Note 2 – Return Loss in dB (Typ.) at mid-band.

Features and Benefits

- Quick-Lock™ and Push-On™ mate with any female SMA
- Excellent for high density applications
- Unique over-molded strain relief is exceptionally rugged and durable
- Quick-Lock™ provides secure connection with positive locking
- Reliable and easy connections
- Ideal for test labs or where fast production testing is required
- Excellent electrical performance to 18 GHz
- No wrenches (torque or other) required
- Minimum of 500 mating cycles



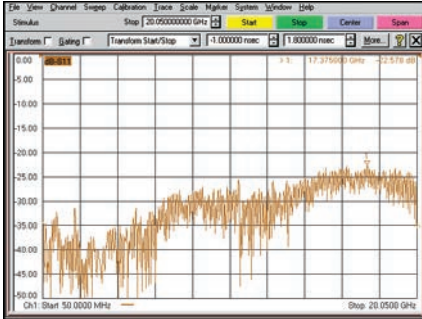
* SMA Push-On™

* SMA Quick-Lock™

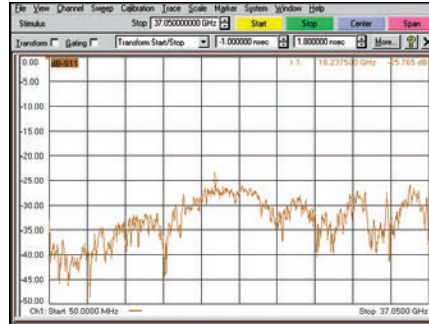
* Please contact Rosenberger factory for details.

Rosenberger® SMA+® Cables

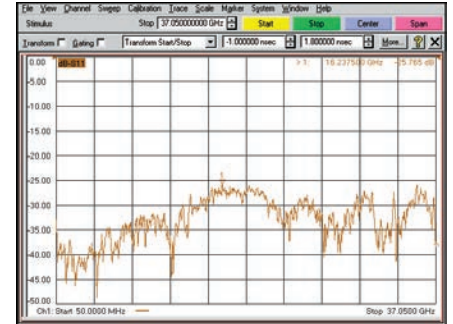
The **PLUS** means 36 GHz performance at a fraction of the cost.



Mated with SMA



Mated with 3.5mm



Mated with 2.92mm

Features and Benefits

- High-performance, high-frequency test cables built for day-to-day applications
- Available in Rosenberger RTK-Flex 405 (flexible) cable or RTK-FS-085 (conformable) cable. Or, special order in 085 semi-rigid cable built to your specifications
- Excellent performance over a broad frequency range (see charts above)
- Standard SMA interface — intermatable with SMA, 3.5mm and 2.92mm (K*) connectors
- Gold-plated center contacts, passivated stainless steel coupling nuts and a proprietary dielectric
- Unique over-molded strain relief is exceptionally rugged and durable
- Temperature range: -55°C to +125°C
- Minimum return loss: -18dB when mated with SMA, 3.5mm or 2.92mm (K*) connectors

* K Connector® is a registered trademark of Anritsu Corporation

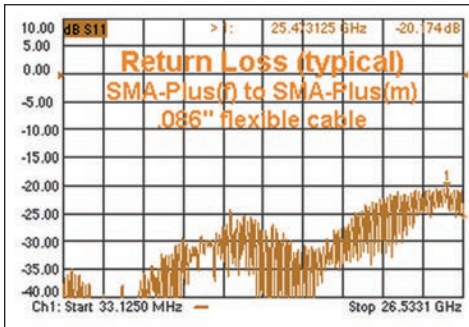


SMA+ Female Connector

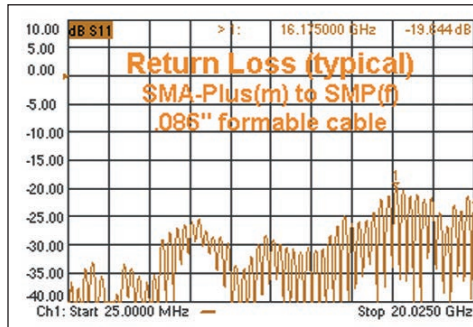


Rosenberger® SMA+® Cables

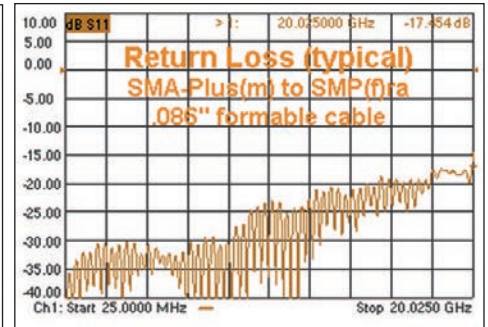
Standard SMP.



Mated with SMA+f



Mated with SMP f



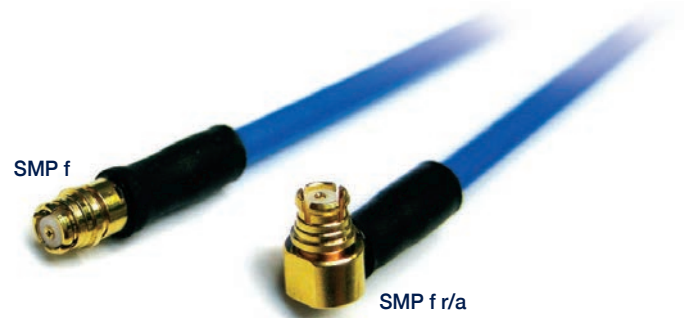
Mated with SMPf r/a

ELECTRICAL SPECIFICATIONS* RTK Flex 405 & RTK FS405

IMPEDANCE, NOMINAL	50 OHMS					
OPERATING FREQUENCY (GHz)	36					
CAPACITANCE NOMINAL	29.4 pf/ft					
VELOCITY OF PROPAGATION, NOMINAL	70.0 %					
RELATIVE SHIELDING	-110.0 dB MIN.					
INSULATION RESISTANCE	1000 MEGOHMS MIN.					
DIELECTRIC WITHSTANDING VOLTAGE	1000 VRMS MIN.					
ELECTRICAL DELAY, NOMINAL	1.43 ns/ft or 120 ps/INCH					
PULSE RF POWER	500 WATTS MAX					
(INTO A 50 OHM SYSTEM, WITH DUTY CYCLE LESS THAN CW RATING)						
FREQUENCY (GHz)	1	6	10	18	26	36
PHASE STABILITY (DEG) TYP	< 1	< 2	< 3	< 5	< 7	< 9
LOSS STABILITY (dB)*	> 0.10	0.20	0.03	0.40	0.60	0.80
*CABLE FORMED AND STRAIGHTENED 90 DEGREES ON A 4" RADIUS						

MECHANICAL SPECIFICATIONS* RTK Flex 405 & RTK FS405

CABLE MAX. DIAMETER	0.104 INCHES	2.64 mm
MIN. ONE TIME BEND RADIUS	0.75 INCHES	1.91 cm
PREFERRED BEND RADIUS	2.00 INCHES	5.08 cm
CONNECTOR RETENTION	10 POUNDS MIN.	44.5 N MIN
TEMPERATURE RANGE	-55 to +125 DEGREES C	
MATING TORQUE	7-10 INCH POUNDS	.8-1.13 N-m
CONNECTOR INTERFACE	MIL-STD-348 HYBRI	



MATERIALS AND FINISHES* RTK Flex 405 & RTK FS405

DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET	FEP	BLUE
MARKER	MIL-I-23053	BLACK or WHITE
BOOTS	ATUM	BLACK
CONTACTS	Brass or BeCu	GOLD PLATED
INSULATORS	PROPRIETARY DIELECTRIC	BLUE
CONNECTOR BODIES	Brass or BeCu	GOLD PLATED
CONNECTOR NUTS	STAINLESS STEEL	PASSIVATED
GASKET	ZZ-R-765	SILICON RUBBER

*Consult factory for additional configurations and options

Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2	
SMA+m-SMA+m	71W-32+S1-32+S1-00305	1.0	1.4	25
RTK Flex 405	71W-32+S1-32+S1-00457	1.5	1.9	25
	71W-32+S1-32+S1-00610	2.0	2.4	25
	71W-32+S1-32+S1-00915	3.0	3.5	25
	71W-32+S1-32+S1-01220	4.0	4.5	25
	71W-32+S1-32+S1-01830	6.0	5.6	25
SMA+m-SMA+f	71W-32+S1-32+K1-00305	1.0	1.4	20
RTK Flex 405	71W-32+S1-32+K1-00457	1.5	1.9	20
	71W-32+S1-32+K1-00610	2.0	2.4	20
	71W-32+S1-32+K1-00915	3.0	3.5	20
	71W-32+S1-32+K1-01220	4.0	4.5	20
	71W-32+S1-32+K1-01830	6.0	5.6	20
SMA+m-SMPf	71H-19K1-32+S1-00102	.33	0.6	18
RTK FS 405	71H-19K1-32+S1-00153	.50	0.8	18
	71H-19K1-32+S1-00203	.67	1.0	18
	71H-19K1-32+S1-00305	1.0	1.4	18
	71H-19K1-32+S1-00457	1.5	1.9	18

Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2	
SMA+m-SMPf r/a	71H-19K2-32+S1-00102	.33	0.6	18
RTK FS 405	71H-19K2-32+S1-00159	.50	0.8	18
	71H-19K2-32+S1-00203	.67	1.0	18
	71H-19K2-32+S1-00305	1.0	1.4	18
	71H-19K2-32+S1-00457	1.5	1.9	18
	SMA+f-SMPf	71H-19K1-32+K1-00102	.33	0.6
RTK FS 405	71H-19K1-32+K1-00159	.50	0.8	18
	71H-19K1-32+K1-00203	.67	1.0	18
	71H-19K1-32+K1-00305	1.0	1.4	18
	71H-19K1-32+K1-00457	1.5	1.9	18
	SMA+f-SMPf r/a	71H-19K2-32+K1-00102	.33	0.6
RTK FS 405	71H-19K2-32+K1-00153	.50	0.8	18
	71H-19K2-32+K1-00203	.67	1.0	18
	71H-19K2-32+K1-00305	1.0	1.4	18
	71H-19K2-32+K1-00457	1.5	1.9	18

Note 1 – Insertion Loss in dB (Typ.) at mid-band.

Note 2 – Return Loss in dB (Typ.) at mid-band.

Warranty– If there is a connector failure during the first six months following shipment, we will repair or replace (at our option) your cable (providing the damage was not caused by misuse or abuse).

Now including, WSMP, 1.85mm, 2.92mm and mini SMP cable assemblies! **NEW.**

Rosenberger High Frequency Cable Assemblies

Rosenberger's high frequency, flexible cable assemblies incorporating our high performance 1.85mm, 2.92mm, Mini SMP and WSMP connectors.



1.85mm Male Connector



WSMP Female Right Angle



WSMP Female Straight



2.92mm Male Straight



Mini SMP Female Right Angle



Mini SMP Female Straight

Series	Description	P/N
RPC 1.85mm to WSMP	1.85mm(m)-1.85mm(m), DC - 70 Ghz, R.L.>= 12 dB @ 50 Ghz, Typical, 8" length. RTK Flex 047.	70W-08S1-08S1-00203
	1.85mm(m) - WSMP(f), DC - 70 Ghz, R.L.>= 12 dB @ 26 Ghz, Typical, 8" length. RTK Flex 047.	70W-08S1-W1K1-00203
	1.85mm(f)-WSMP(f), DC-70 Ghz,R.L.>= 12 dB @ 50 Ghz, Typical, 3.1" length. RTK Flex 047. (Short, 80 mm length,with female connector for staggered cable assembly application close to PCB).	70W-08K1-W1K1-00080
	1.85mm(m)-WSMP(f) right angle, DC -70 Ghz, R.L.>=10 dB @ 50 Ghz, Typical, 8" length. RTK Flex 047.	70W-08S1-W1K2-00203
RPC 2.92mm to WSMP	2.92mm(m)-WSMP(f), DC-40 Ghz, R.L. >= 12 dB @ 26 Ghz, Typical, 8" length. RTK Flex 047.	70W-02S1-W1K1-00203
	2.92mm(f)-WSMP(f), DC-40 Ghz, R.L.>= 12 dB @ 26 Ghz, Typical, RTK Flex 047, 3.1" length. (Short, 80 mm length, with female connector for staggered cable assembly application close to PCB).	70W-02K1-W1K1-00080
	2.92mm(m)-WSMP(f) right angle, DC-70 Ghz, R.L. >= 10 dB @ 50 Ghz, Typical, 8" length. RTK Flex 047.	70W-02S1-W1K2-00203
RPC 2.92mm to 2.92mm	2.92mm(m)-2.92mm(m), DC - 40 Ghz, R.L.>=16 dB @ 40 Ghz, Typical, 12" length. RTK Flex 047.	70W-02S1-02S1-00203
RPC 2.92mm to Mini SMP	2.92mm(m)-Mini SMP(f), straight, DC-40 Ghz, R.L. >= 15 dB @ 18 Ghz, Typical, 8" length. RTK Flex 047.	70W-02S1-18K1-00203
	2.92mm(f)-Mini SMP(f), straight, DC-40 Ghz, R.L. >= 15 dB @ 18 Ghz, Typical, 3.1" length. (Short, 80 mm length, with female connector for staggered cable assembly application close to PCB).	70W-02K1-18K1-00080

Series	Description	P/N
WSMP- WSMP	WSMP(f) straight -WSMP(f) Straight, DC-70 Ghz, R.L. >= 15 dB @ 26 Ghz, Typical, 8" length. RTK Flex 047.	70W-W1K1-W1K1-00203
	WSMP(f), r/a - WSMP(f) r/a, DC-70 Ghz, R.L. >= 15 dB @ 18 Ghz, Typical, 8" length. RTK Flex 047.	70W-W1K2-W1K2-00203
	WSMP(f), straight - WSMP(f) right angle, DC-70 Ghz, R.L. >= 17dB @ 18 Ghz, Typical, 8" length. RTK Flex 047.	70W-W1K1-W1K2-00203
RPC 1.85mm - Mini SMP	Straight to 1.85mm(m) - Mini SMP(f), straight, DC-65 Ghz, R.L. >= 15 dB @ 26.5 Ghz, Typical, 8" length. RTK Flex 047.	70W-08S1-18K1-00203
	1.85mm(f) - Mini SMP(F), DC- 65 Ghz, R.L. >= 15 dB @ 26.5 Ghz, Typical, 3.1" length. (Short, 80 mm length, with female connector for staggered cable assembly application close to PCB).	70W-08K1-18K1-00080
Mini SMP to Mini SMP	Mini SMP straight to mini SMP straight, DC-65 Ghz, R.L. >= 20 dB @ 18 Ghz, Typical, 8" length. RTK 047 Flex cable.	70W-18K1-18K1-00203
	Mini SMP straight to mini SMP r/a, DC -28 Ghz, R.L. >= 16 dB @ 12 Ghz, Typical, 8" length. RTK Flex 047 cable. Now with Rosenberger High Performance right angle technology.	70W-18K1-18K2-00203
	Mini SMP r/a to mini SMP r/a, DC-18 Ghz, R.L. >= 14 dB @ 12 Ghz., Typical, 8" length. RTK Flex 047 cable. Now with Rosenberger High Performance right angle technology.	70W-18K2-18K2-00203

Rosenberger® Semi-Rigid Cables

If your application needs semi-rigid cable, demand Rosenberger performance.

Whether you need one piece or thousands, turn to Rosenberger for reliable S/R cable performance. With 15 CNC bending machines located strategically around the world — four in the USA — Rosenberger provides complex S/R configurations to exacting tolerances. We also assure repeatable performance to your specifications — to 67 GHz. RoHS-compliant assemblies are available. Rosenberger S/R cables can be specified in diameters from .020"-.250", with phase-matching by pair or lot.



- Need S/R? Demand Rosenberger performance.
- No NRE or set-up costs
 - Your design to finished parts in days... not weeks!
 - 3-D drawings available – please consult factory



Pride in Precision.

Rosenberger

Rosenberger North America

P.O. Box 309
Akron, PA 17501 USA
Phone: +1 717-859-8900
Email: salesinfo@rosenbergerna.com
Web: www.rosenberger.com/us_en

Rosenberger

Rosenberger Hochfrequenztechnik GmbH & Co. KG

Hauptstrasse 1 | 83413 Fridolfing
P.O. Box 1260 | 84526 Tittmoning
Germany
Phone: +49 8684 18-0
Email: info@rosenberger.de
Web: www.rosenberger.com
Certified by ISO/TS 16949 · DIN EN 9100 · ISO 9001 · ISO 14001

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Rosenberger:](#)

[71H-19K1-32+S1-00102](#)