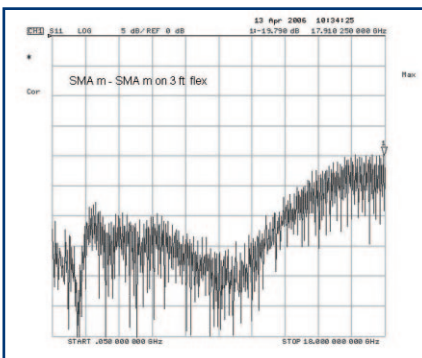


Rosenberger® RFlex® Cables

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

Features and Benefits

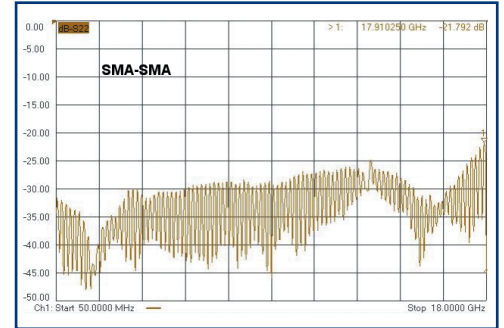
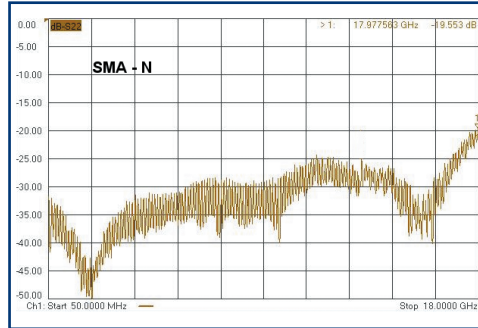
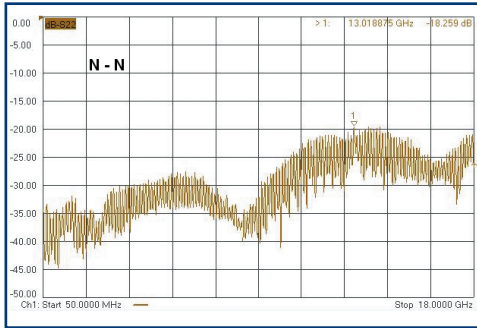
- Microwave test cable performance at a fraction of the cost
- Excellent performance over a broad frequency range: -20dB return loss (typ.) at DC to 18 GHz (SMA.m-SMA.m)
- Rosenberger's superior-shielded cable is cost effective and allows relative shielding of -100 dB (min)
- RoHS compliant
- Rosenberger 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



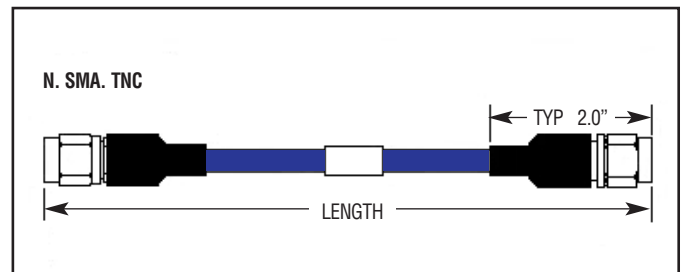
	OAL in FT.	Part # RoHS Compliant	IL (dB) Typ NOTE 1	RL (dB) Typ NOTE 2
SMAm-SMAm	1.5	L72-448-457	0.8	28
	2.0	L72-448-610	1.0	28
	3.0	L72-448-915	1.5	28
	4.0	L72-448-1220	1.7	28
	6.0	L72-448-1830	3.0	28
Nm-SMAm	2.0	L72-449-610	1.0	26
	3.0	L72-449-915	1.5	26
	4.0	L72-449-1220	1.7	26
	6.0	L72-449-1830	3.0	26
	15	L72-449-4570	7.3	26
Nm-Nm	2.0	L72-450-610	1.0	26
	3.0	L72-450-915	1.5	26
	6.0	L72-450-1830	3.0	26
	15	L72-450-4570	7.3	26
	20	L72-450-6100	9.4	26
	25	L72-450-7620	11.7	26
SMAf-SMAm	3.0	L72-451-915	1.5	25
SMAf-Nm	2.0	L72-454-610	1.0	25
	3.0	L72-454-915	1.5	25
	6.0	L72-454-1830	3.0	25
SMAm-TNCm	1.5	L72-452-457	0.8	18
	2.0	L72-452-610	1.0	18
	3.0	L72-452-915	1.5	18
	4.0	L72-452-1220	1.7	18
	6.0	L72-452-1830	3.0	18

Note 1 – Insertion Loss in dB (Typ.) at mid-band
Note 2 – Return Loss in dB (Typ.) at mid-band.





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	

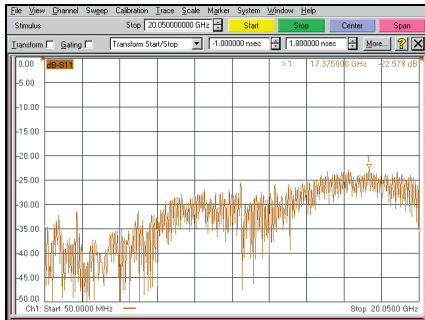


MECHANICAL SPECIFICATIONS RTK Flex 402	
CABLE MAX. DIAMETER	0.163 INCHES 4.14 mm
MIN. ONE TIME BEND RADIUS	1.00 INCHES 2.54 cm
PREFERRED BEND RADIUS	4.00 INCHES 10.20 cm
CONNECTOR RETENTION	25 POUNDS MIN. 111 N MIN
TEMPERATURE RANGE	-55 to +125 DEGREES C
MATING TORQUE	7-10 INCH POUNDS .8-1.13 N-m
CONNECTOR INTERFACE	MIL-STD-348 HYBRID

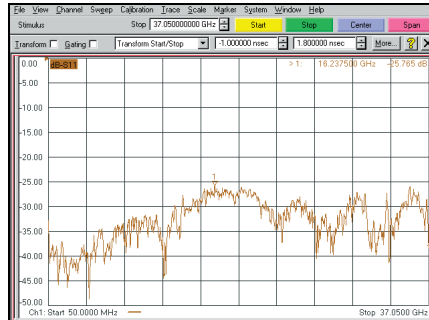
MATERIALS AND FINISHES RTK Flex 402		
DESCRIPTION	MATERIAL	FINISH OR COLOR
CABLE JACKET	FEP	BLUE
MARKER	MIL-I-23053	BLACK or WHITE
BOOTS	ATUM	BLACK
CONTACTS	Brass or BeCu	GOLD PLATED
INSULATORS	PTFE	NONE
CONNECTOR BODIES	Brass or BeCu	GOLD PLATED
CONNECTOR NUTS	STAINLESS STEEL	PASSIVATED
GASKET	ZZ-R-765 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
L72-448-305	SMA M-SMA M	12	0.25	30.5	6.35	30	27	18	0.20	0.54	0.90
L72-448-457	SMA M-SMA M	18	0.25	45.7	6.35	30	27	18	0.34	0.74	1.14
L72-448-610	SMA M-SMA M	24	0.25	61.0	6.35	30	27	18	0.45	0.97	1.51
L72-448-915	SMA M-SMA M	36	0.50	91.5	12.70	30	27	18	0.63	1.37	2.13
L72-448-1220	SMA M-SMA M	48	0.50	122.0	12.70	30	27	18	0.81	1.77	2.75
L72-448-1830	SMA M-SMA M	72	0.75	183.0	19.05	30	27	18	1.18	2.56	3.98
L72-449-610	N M- SMA M	24	0.25	61.0	6.35	28	24	17	0.49	0.92	1.37
L72-449-915	N M- SMA M	36	0.50	91.5	12.70	28	24	17	0.67	1.32	1.99
L72-449-1220	N M- SMA M	48	0.50	122.0	12.70	28	24	17	0.86	1.71	2.61
L72-449-1830	N M- SMA M	72	0.75	183.0	19.05	28	24	17	1.22	2.44	3.72
L72-449-4570	N M- SMA M	180	1.50	457.0	38.10	28	24	17	3.66	7.32	11.17
L72-450-610	N M- N M	24	0.25	61.0	6.35	28	24	17	0.47	0.90	1.35
L72-450-915	N M- N M	36	0.50	91.5	12.70	28	24	17	0.65	1.29	1.97
L72-450-1830	N M- N M	72	0.75	183.0	19.05	28	24	17	0.83	1.69	3.99
L72-450-4570	N M- N M	180	1.50	457.0	38.10	28	24	17	3.12	6.33	9.71
L72-450-6100	N M- N M	240	2.00	610.0	50.80	28	24	17	4.17	8.44	12.95
L72-450-7620	N M- N M	280	2.50	762.0	63.50	28	24	17	4.87	9.85	15.11
L72-451-915	SMA F- SMA M	36	0.50	91.5	12.70	28	24	18	0.69	1.40	2.20
L72-454-610	SMA F- N M	24	0.25	61.0	6.35	28	24	17	0.48	0.98	1.63
L72-454-915	SMA F- N M	36	0.50	91.5	12.70	28	24	17	0.71	1.38	2.19
L72-454-1830	SMA F- N M	72	0.75	183.0	19.05	28	24	17	1.21	2.65	4.05
L72-452-457	SMA M- TNC M	18	0.25	45.7	6.35	23	18	15	0.37	0.69	1.10
L72-452-610	SMA M- TNC M	24	0.25	61.0	6.35	23	18	15	0.49	0.92	1.48
L72-452-915	SMA M- TNC M	36	0.50	91.5	12.70	23	18	15	0.67	1.32	2.18
L72-452-1220	SMA M- TNC M	48	0.50	122.0	12.70	23	18	15	0.89	1.71	2.80
L72-452-1830	SMA M- TNC M	72	0.75	183.0	19.05	23	18	15	1.22	2.45	3.98

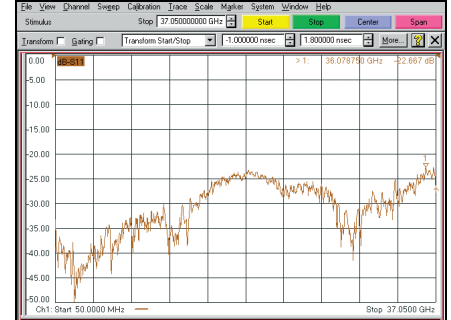
THE PLUS MEANS 36GHz PERFORMANCE AT



Mated with SMA



Mated with 3.5mm

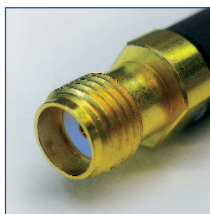


Mated with 2.92mm

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

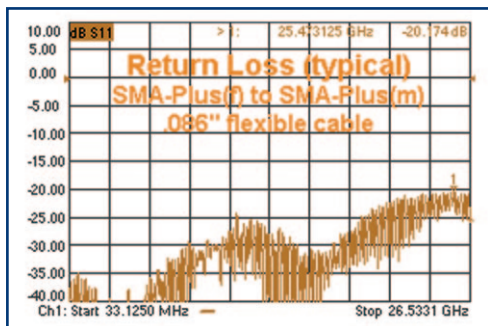
* K Connector® is a registered trademark of Anritsu Corporation



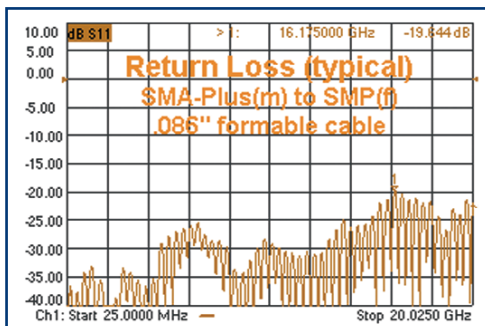
SMA+ Female Connector



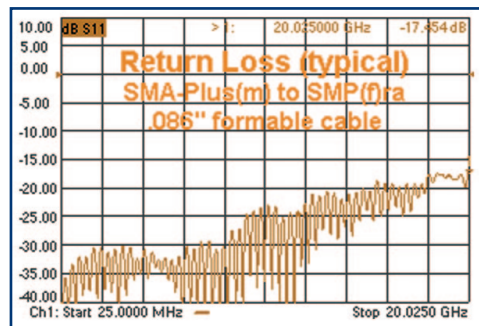
A FRACTION OF THE COST.



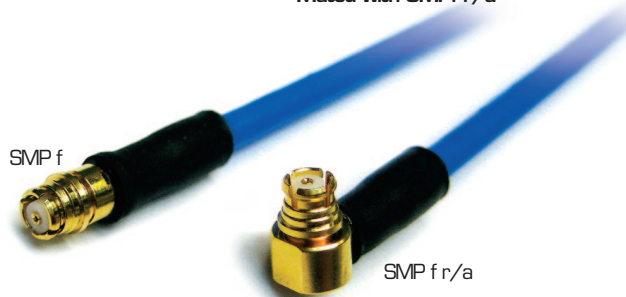
Mated with SMA+f



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 HYBRID	

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 RTK Flex 405	L71-404-305	1.0	1.4	25
	L71-404-457	1.5	1.9	25
	L71-404-610	2.0	2.4	25
	L71-404-915	3.0	3.5	25
	L71-404-1220	4.0	4.5	25
	L71-404-1830	6.0	5.6	25
SMA+m-SMA+f RTK Flex 405	L71-438-305	1.0	1.4	20
	L71-438-457	1.5	1.9	20
	L71-438-610	2.0	2.4	20
	L71-438-915	3.0	3.5	20
	L71-438-1220	4.0	4.5	20
	L71-438-1830	6.0	5.6	20
SMA+m-SMPf RTK FS 405	L71-799-102	.33	0.6	18
	L71-799-153	.50	0.8	18
	L71-799-203	.67	1.0	18
	L71-799-305	1.0	1.4	18
	L71-799-457	1.5	1.9	18

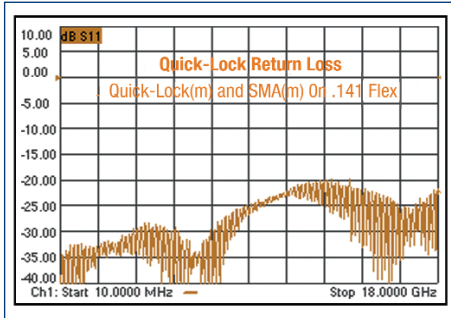
	Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2
SMA+m-SMPf r/a RTK FS 405	L71-800-102	.33	0.6	18
	L71-800-153	.50	0.8	18
	L71-800-203	.67	1.0	18
	L71-800-305	1.0	1.4	18
	L71-800-457	1.5	1.9	18
SMA+f-SMPf RTK FS 405	L71-801-102	.33	0.6	18
	L71-801-153	.50	0.8	18
	L71-801-203	.67	1.0	18
	L71-801-305	1.0	1.4	18
	L71-801-457	1.5	1.9	18
SMA+f-SMPf r/a RTK FS 405	L71-802-102	.33	0.6	18
	L71-802-153	.50	0.8	18
	L71-802-203	.67	1.0	18
	L71-802-305	1.0	1.4	18
	L71-802-457	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.

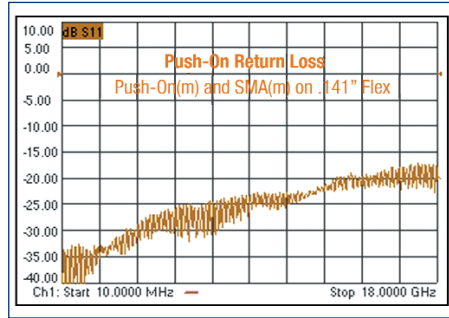
Warranty – If there is a connector failure during the first six months following shipment, we will repair or replace (at our option) your cable (providing the damage was not caused by misuse or abuse).

ROSENBERGER TEST CABLES: ONE TRUSTED SOURCE FOR PERFORMANCE AND VALUE.

FEATURING NEW QUICK-LOCK™ AND PUSH-ON™ SMA CONNECTORS.



Quick-Lock™ Return Loss



Push-On™ Return Loss

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

	Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2
SMAm to SMA Push-On™ m RTK Flex 402	L72-486-305	1.0	0.6	25
	L72-486-457	1.5	0.8	25
	L72-486-610	2.0	1.0	25
	L72-486-915	3.0	1.5	25
	L72-486-1220	4.0	1.7	25
	L72-486-1830	6.0	3.0	25
SMAm to SMA Push-On™ m RTK Flex 405	L71-796-305	1.0	0.9	25
	L71-796-457	1.5	1.2	25
	L71-796-610	2.0	1.5	25
	L71-796-915	3.0	2.3	25
	L71-796-1220	4.0	2.6	25
	L71-796-1830	6.0	4.5	25
SMAm-to SMA Quick-Lock™ m RTK Flex 402	L72-487-305	1.0	0.6	25
	L72-487-457	1.5	0.8	25
	L72-487-610	2.0	1.0	25
	L72-487-915	3.0	1.5	25
	L72-487-1220	4.0	1.7	25
	L72-487-1830	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.



SMA Push-On

SMA Quick-Lock

Rosenberger® RTK-028 Cables

TRIPLE-SHIELDED AND STILL THIS FLEXIBLE. SPECIFY ROSENBERGER RTK-028 COAXIAL CABLE.

Triple-shielded and still this flexible.

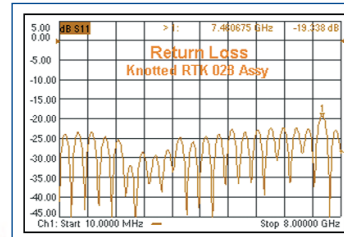
Not just any supplier can sell you .085" coaxial cable that delivers high performance, triple-shielding and RoHS compliance, not to mention a wide selection of performance-matched connectors.

And only Rosenberger can deliver all these plus the exclusive benefits of triple-shielding and exceptional flexibility combined. Introducing RTK-028 triple-shielded cable, available exclusively from Rosenberger.

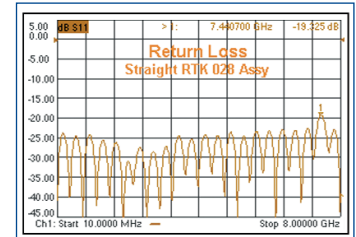
Compare the plots to the right – knotted and un-knotted. Rosenberger's narrow-diameter RTK-028 cable is designed for performance, allowing greater design flexibility while providing the outstanding electrical performance of more rigid products. Even when knotted there is no noticeable degradation in the electrical performance of the cable (see charts).

Call Rosenberger today to specify the performance of RTK-028 triple-shielded cable.

- A drop in replacement for RG316DS Cables
- Excellent performance to 8 GHz
- Super flexibility



Return Loss–Knotted RTK-028



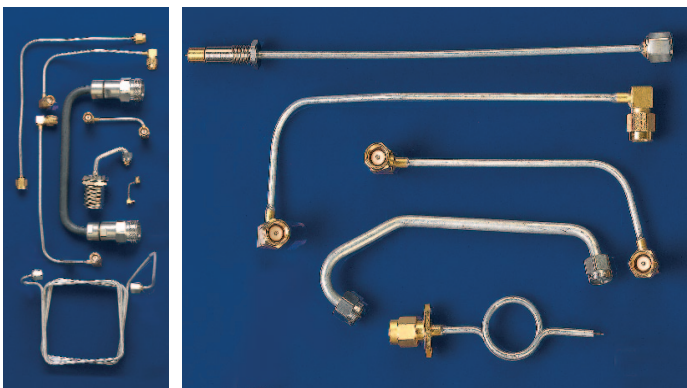
Return Loss–Straight RTK-028

	Part # RoHS Compliant	OAL in FT.	IL (dB) NOTE 1	Ret Ls (dB) NOTE 2
SMAm-SMAm	L71-803-457	1.5	1.5	22
	L71-803-610	2.0	2.0	22
RTK-028	L71-803-915	3.0	3.3	22
	L71-803-1220	4.0	4.0	22
	L71-803-1830	6.0	6.0	22

Note 1 – Insertion Loss in dB (Typ.) at mid-band
Note 2 – Return Loss in dB (Typ.) at mid-band.

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 supplied at no extra cost.

Rosenberger®

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Asia: Rosenberger Asia Pacific Tel: (China) + 86/10/80 78 1995
South America: Rosenberger Sudamerica Ltda. (Chile) + 56/2/2 75 29 08
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Mouser Electronics

Authorized Distributor

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