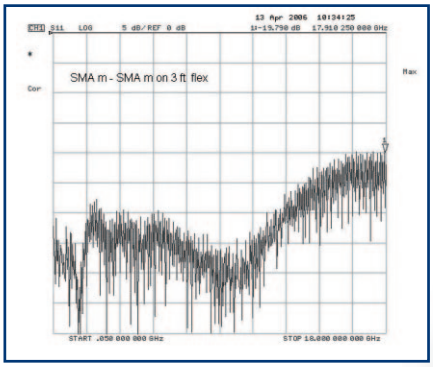
Rosenberger® RFlex® Cables

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

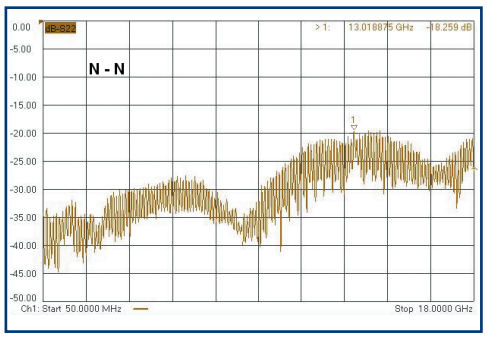
Features and Benefits

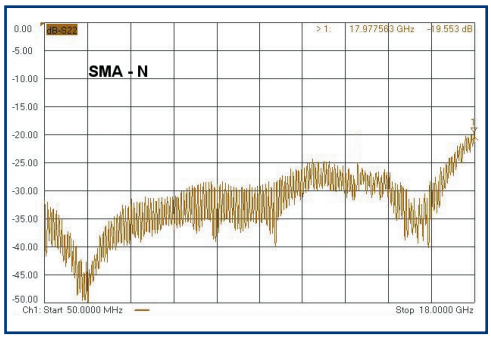
- Microwave test cable performance at a fraction of the cost
- Excellent performance over a broad frequency range: -20dB return loss (typ.) at DC to 18 GHz (SMA.m-SMA.m)
- Rosenberger's superior-shielded cable is cost effective and allows relative shielding of –100 dB (min)
- RoHS compliant
- Rosenberger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

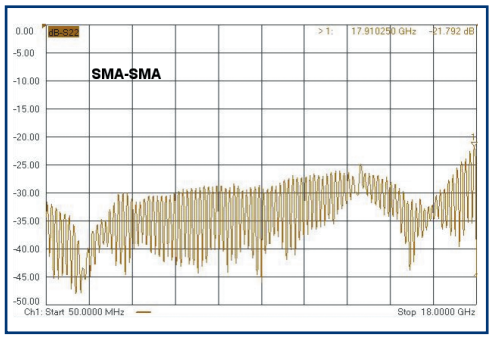


	OAL in FT.	Part # RoHS Compliant	IL (dB) Typ NOTE 1	RL (dB) Typ NOTE 2
SMAm-SMAm	1.5	L72-448-457	0.8	28
	2.0	L72-448-610	1.0	28
	3.0	L72-448-915	1.5	28
	4.0	L72-448-1220	1.7	28
	6.0	L72-448-1830	3.0	28
Nm-SMAm	2.0	L72-449-610	1.0	26
	3.0	L72-449-915	1.5	26
	4.0	L72-449-1220	1.7	26
	6.0	L72-449-1830	3.0	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.



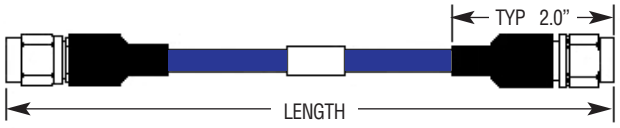




ELECTRICAL SPECIFICATIONS-RTK Flex 402						
IMPEDANCE, NOMINAL	50 OHMS					
OPERATING FREQUENCY (GHz)	18					
CAPACITANCE NOMINAL	29.4 pf/ft					
VELOCITY OF PROPAGATION, NOMINAL	70.0 %					
RELATIVE SHIELDING	-110.0 dB MIN.					
INSULATION RESISTANCE	1000 MEGOHMS MIN.					
DIELECTRIC WITHSTANDING VOLTAGE	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	

N. SMA. TNC

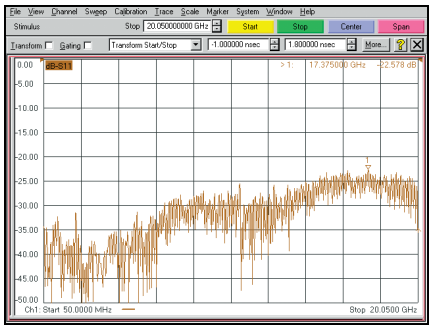


MATERIALS AND FINISHES RTK Flex 402		
DESCRIPTION	*MATERIAL*	*FINISH OR COLOR*
CABLE JACKET	FEP	BLUE
MARKER	MIL-I-23053	BLACK or WHITE
BOOTS	ATUM	BLACK
CONTACTS	Brass or BeCu	GOLD PLATED
INSULATORS	PTFE	NONE
CONNECTOR BODIES	Brass or BeCu	GOLD PLATED
CONNECTOR NUTS	STAINLESS STEEL	PASSIVATED
GASKET	ZZ-R-765 SILICON RUBBER	

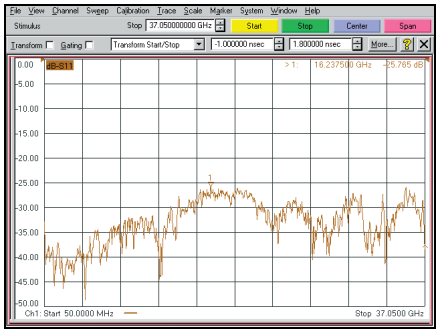
PART NUMBER	CONNECTOR TYPE	LENGTH INCHES	(+ -) LENGTH INCHES	LENGTH cm	(+ -) LENGTH mm	TYP RETURN LOSS IN dB AT FREQ. (IN GHz) UP TO 2	UP TO 8	UP TO 18	TYP INSERTION LOSS IN dB AT FREQ. (IN GHz) LENGTH UP TO 2	UP TO 8	UP TO 18
L72-448-305	SMA M-SMA M	12	0.25	30.5	6.35	30	27	18	0.20	0.54	0.90
L72-448-457	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

Rosenberger® SMA+® Cables

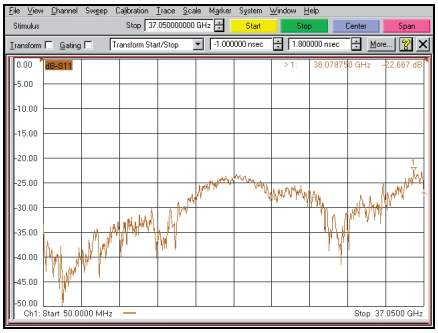
THE PLUS MEANS 36GHz PERFORMANCE AT



Mated with SMA



Mated with 3.5mm



Mated with 2.92mm

Features and Benefits

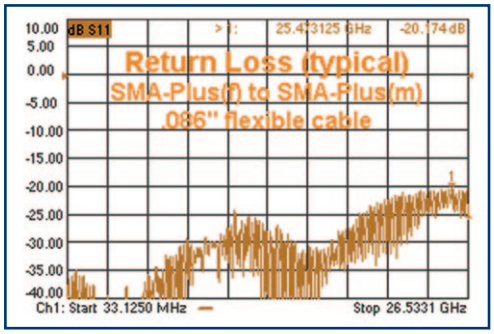
- High-performance, high-frequency test cables built for day-to-day applications
- Available in Rosenberger RTK-Flex 405 (flexible) cable or RTK-FS-085 (conformable) cable. Or, special order in 085 semi-rigid cable built to your specifications
- Excellent performance over a broad frequency range (see 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: -55ºC to +125ºC
- Minimum return loss: -18dB when mated with SMA, 3.5mm or 2.92mm (K*) connectors

* K Connector® is a registered trademark of Anritsu Corporation

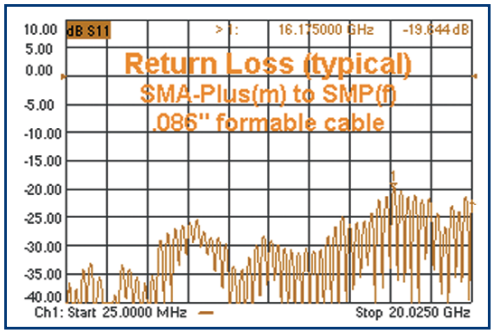
SMA+ Female Connector

North America: Rosenberger of North America, LLC, (USA) 717-290-8000
Europe: Rosenberger Hochfrequenztechnik GmbH &Co KG (Germany) Tel: + 49/86 84/18-0
Asia: Rosenberger Asia Pacific Tel: (China) + 86/10/80 78 1995
South America: Rosenberger Sudamerica Ltda. (Chile) + 56/2/2 75 29 08
Email…info@rosenbergerna.com WEB…www.rosenbergerna.com

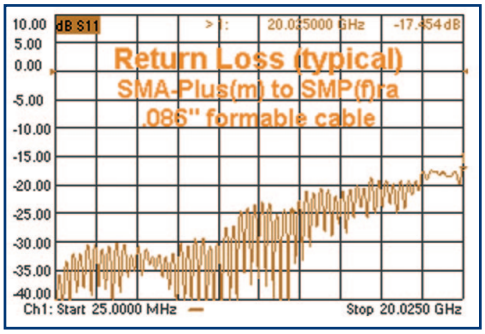
T A FRACTION OF THE COST.



Mated with SMA+f



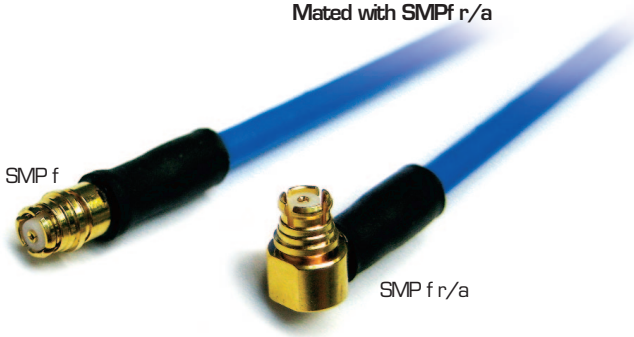
Mated with SMP f



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

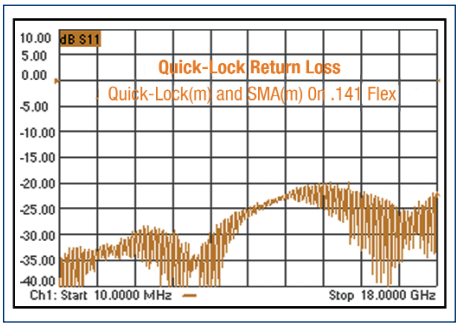
Note 1 – Insertion Loss in dB (Typ.) at mid-band
Note 2 – Return Loss in dB (Typ.) at mid-band.

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).

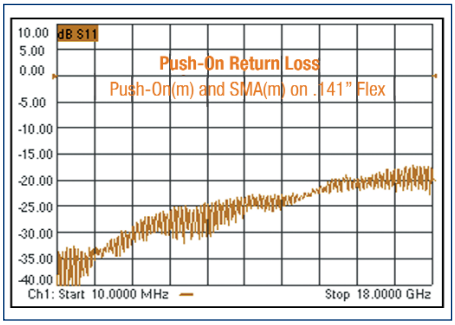
Rosenberger® RFlex® Cables

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

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



Quick-Lock™ Return Loss



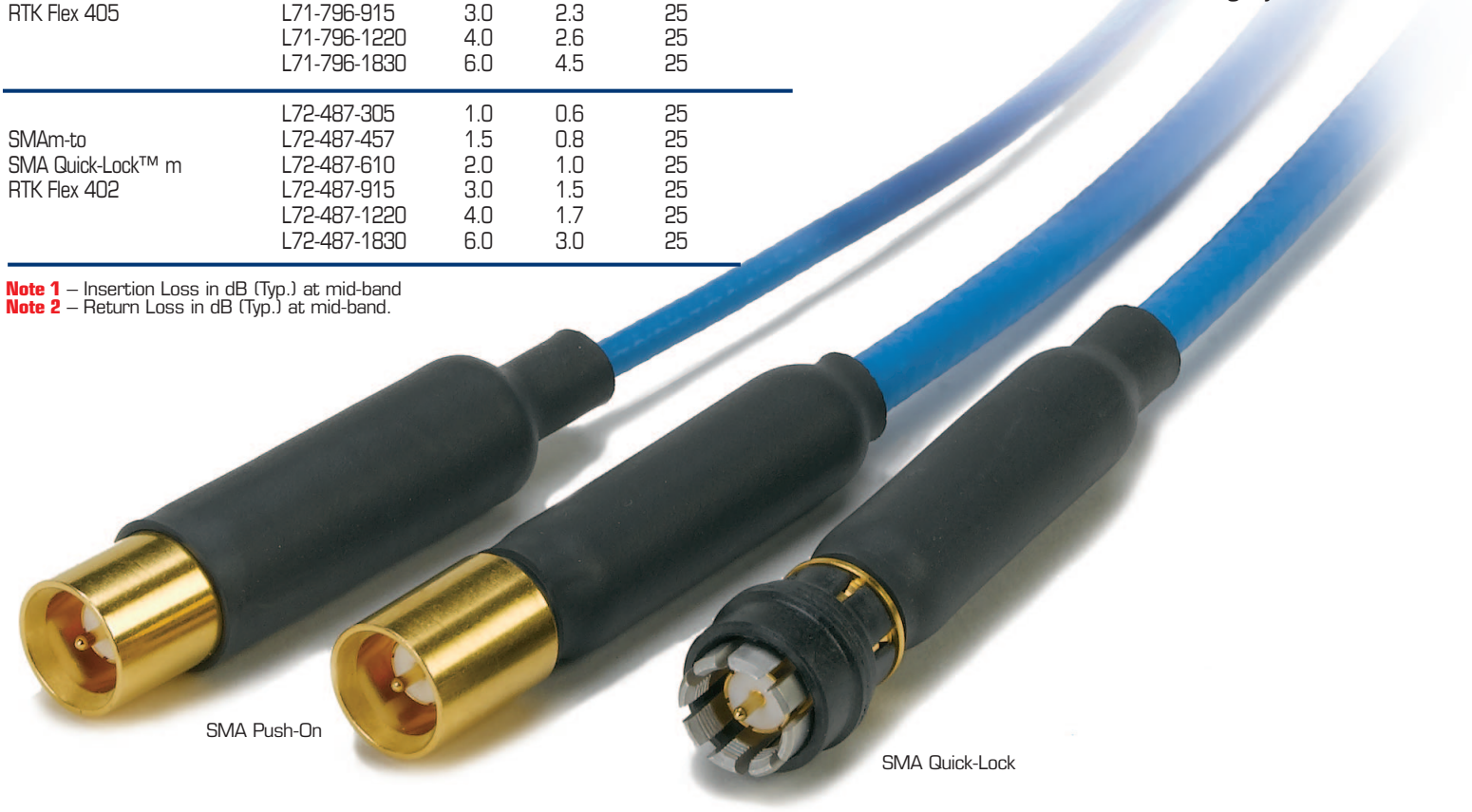
Push-On™ Return Loss

	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.

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