

# LMR<sup>®</sup>-600-UF UltraFlex Communications Coax

## Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application that requires periodic/repeated flexing



Part Description				
Part Number	Application	Jacket	Color	Stock Code
LMR-600-UF	Indoor/Outdoor	TPE	Black	54044

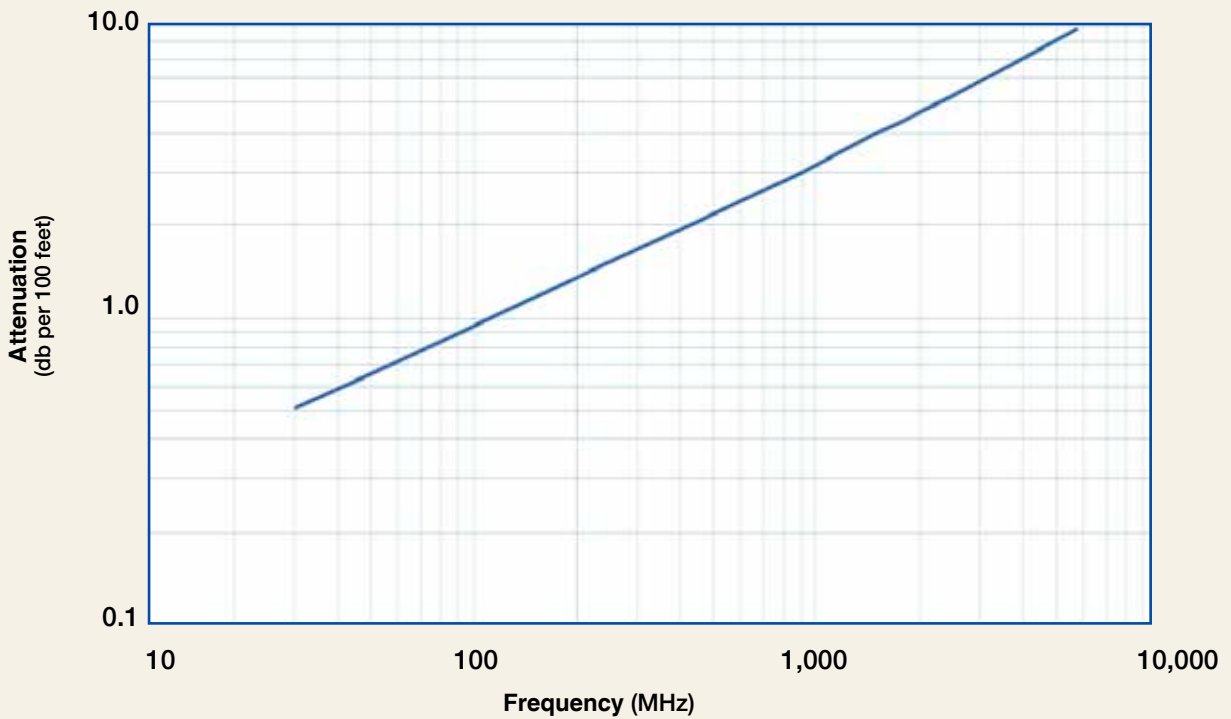
Environmental Specifications			
Performance Property	'F	°C	
Installation Temperature Range	-40/+185	-40/+85	
Storage Temperature Range	-94/+185	-70/+85	
Operating Temperature Range	-40/+185	-40/+85	

Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	Stranded BC	0.176	(4.47)
Dielectric	Foam Polyethylene	0.455	(11.56)
Outer Conductor	Aluminum Tape	0.461	(11.71)
Overall Braid	Tinned Copper	0.490	(12.45)
Jacket	Black Thermoplastic Elastomer	0.590	(14.99)

Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	1.5	(38.1)
Bend Radius: repeated	in. (mm)	6.0	(152.4)
Bending Moment	ft-lb (N-m)	1.75	(2.37)
Weight	lb/ft (kg/m)	0.165	(0.25)
Tensile Strength	lb (kg)	350	(158.9)
Flat Plate Crush	lb/in. (kg/mm)	40	(0.71)

Electrical Specifications			
Performance Property	Units	US	(metric)
Velocity of Propagation	%	87	
Dielectric Constant	NA	1.32	
Time Delay	nS/ft (nS/m)	1.17	(3.83)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	23.4	(76.6)
Inductance	uH/ft (uH/m)	0.058	(0.19)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	0.43	(1.42)
Outer Conductor	ohms/1000ft (/km)	1.2	(3.9)
Voltage Withstand	Volts DC	4000	
Jacket Spark	Volts RMS	8000	
Peak Power	kW	40	

**Attenuation vs. Frequency (typical)**



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
Attenuation dB/100 ft	0.5	0.7	1.2	1.4	2.1	3.0	4.0	4.4	4.7	5.3	8.7
Attenuation dB/100 m	1.7	2.2	3.8	4.6	6.8	9.8	13.1	14.5	15.3	17.4	28.6
Avg. Power kW	4.59	3.53	2.00	1.64	1.12	0.77	0.58	0.52	0.49	0.43	0.26

**Calculate Attenuation =**

$(0.090660) \cdot \sqrt{\text{FMHz}} + (0.000312) \cdot \text{FMHz}$  (interactive calculator available at [http://www.timesmicrowave.com/cable\\_calculators](http://www.timesmicrowave.com/cable_calculators))

**Attenuation:**

VSWR=1.0; Ambient = +25°C (77°F)

**Power:**

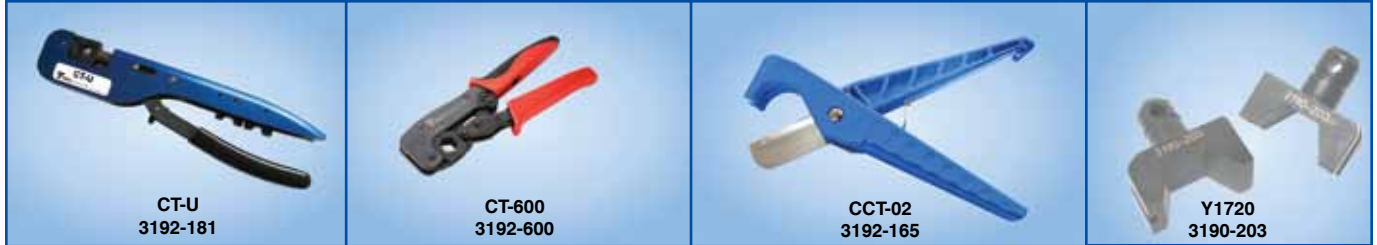
VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F); Sea Level; dry air; atmospheric pressure; no solar loading

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Connectors													
Interface	Description	Part Number	Stock Code	VSWR** Freq. (GHz)	Coupling Nut	Inner Contact Attach	Outer Contact Attach	Finish* Body /Pin	Length in (mm)	Width in (mm)	Weight lb (g)		
1. 7-16 DIN Female	Straight Jack	TC-600-716-FC	3190-375	<1.25:1 (2.5)	NA	Solder	Clamp	S/S	1.1 (28)	1.00 (25.4)	0.249 (112.9)		
2. 7-16 DIN Male	Straight Plug	TC-600-716-MC	3190-502	<1.25:1 (2.5)	Hex	Solder	Clamp	S/S	2.0 (51)	1.30 (33.0)	0.347 (157.4)		
3. 7-16 DIN Male	Right Angle	TC-600-716M-RA	3190-395	<1.35:1 (2.5)	Hex	Solder	Crimp	S/S	1.4 (36)	1.40 (35.6)	0.354 (160.8)		
4. N Male	Straight Plug	TC-600-NMC	3190-357*	<1.25:1 (2.5)	Hex	Solder	Clamp	S/G	2.1 (53)	0.92 (23.4)	0.208 (93.4)		
5. N Male	Right Angle	TC-600-NMC-RA	3190-233	<1.35:1 (2.5)	Hex	Solder	Clamp	S/G	2.1 (53)	0.92 (23.4)	0.280 (117.9)		
6. N Male	Right Angle	TC-600-NMH-RA-D	3190-2427	<1.35:1(6)	Hex	Solder	Crimp	A/G	1.8 (46.5)	1.62 (41.2)	0.185 (84.3)		
7. N Male	Straight Plug	TC-600-NMH-75/50	3190-1610	<1.35:1 (6)	Hex	Solder	Crimp	N/G	2.1 (52.8)	0.91 (23.1)	0.130 (59.0)		
8. TNC	Straight Plug	TC-600-TM-RP	3190-1064	<<1.35:1 (6)	Knurl	Solder	Crimp	N/G	1.6 (40.2)	0.68 (17.0)	0.090 (40.8)		
9. TNC	Straight Plug	TC-600-TM-X	3190-2530	<1.25:1 (6)	Hex/Knurl	Solder	Crimp	A/G	2.3 (57.6)	0.75 (19.0)	0.100 (45.6)		
10. BNC Male	Right Angle	TC-600-BM-RA	3190-2734	<1.30:1 (4)	Knurl	Solder	Crimp	A/G	1.8 (45.5)	1.54 (39.0)	0.164 (74.3)		
11. N Female	Bulkhead Jack	TC-600-NF-BH	3190-589*	<1.25:1 (2.5)	NA	Solder	Crimp	S/G	2.4 (61)	0.88 (22.4)	0.195 (88.5)		
12. N Female	Bulkhead Jack	TC-600-NFC-BH	3190-466	<1.25:1 (2.5)	NA	Solder	Clamp	S/G	2.2 (56)	0.94 (23.9)	0.214 (97.1)		
13. UHF Male	Straight Plug	TC-600-UMC	3190-213	<1.25:1 (2.5)	Knurl	Solder	Clamp	S/G	1.7 (43)	0.88 (22.4)	0.198 (89.8)		
14. N Male	Straight Plug	TC-600-NMH-X	3190-2628	<1.25:1 (8)	Hex/Knurl	Solder	Crimp	A/G	2.1 (53)	0.92 (23.4)	0.166 (75.3)		
15. BNC Male	Right Angle	TC-600-BM-RA	3190-2734	<1.30:1 (4)	Knurl	Solder	Crimp	A/G	1.8 (45.5)	1.54 (39.0)	0.164 (74.3)		

\* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy \*\*VSWR spec based on 3 foot cable with a connector pair



## Install Tools

Type	Part Number	Stock Code	Description
Crimp Tool	CT-U	3192-181	Crimp Handle (Dies Required)
Crimp Dies	Y1720	3190-203	.610" Hex Dies
Crimp Tool	CT-600	3192-170	Crimp tool for LMR-600 connectors
Cutting Tool	CCT-02	3192-165	Cable end flush cut tool
Replacement Blade	RB-01	3190-1609	Replacement blade for cutting tool



## Accessories

Type	Part Number	Stock Code	Description
Ground Kit	GK-S600TT	GK-S600TT	Standard Grounding Kit (each)
Hoisting Grip	HG-600T	HG-600T	Split/Laced Type (each)
Cold Shrink	CS-A600T	CS-A600T	Cable to Antenna Junction (each)
Cold Shrink	CS-60120T	CS-60120T	LMR-600 to -1200 Junction (each)
Cold Shrink	CS-60170T	CS-60170T	LMR-600 to -1700 Junction (each)
Standard Entry Port Cushion	SC-600T-3	SC-600T-3	Three Cables (each)
Standard Entry Panels	Full Range of Port Styles/Combinations Available		
Hanger Blocks	CB-600T	CB-600T	Dual Cable Support Block (kit of 10)
Hanger Block Supporting Hardware	Complete Range of Supporting Hardware & Adapters Available		