

## **LMR®-300-UF UltraFlex Communications Coax**

### Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application that requires additional flexibility

Construction Specifications						
Description	Material	ln.	(mm)			
Inner Conductor	Stranded BC	0.070	(1.78)			
Dielectric	Foam Polyethylene	0.190	(4.83)			
Outer Conductor	Aluminum Tape	0.196	(4.98)			

Overall Braid

Jacket

LMR.300.ULTRAFLEX TIM

(5.72)

(7.62)

Mechanical Specifications								
Performance Property	Units	US	(metric)					
Bend Radius: installation	in. (mm)	0.88	(22.2)					
Bend Radius: repeated	in. (mm)	3.0	(76.2)					
Bending Moment	ft-lb (N-m)	0.2	(0.27)					
Weight	lb/ft (kg/m)	0.055	(80.0)					
Tensile Strength	lb (kg)	120	(54.5)					
Flat Plate Crush	lb/in. (kg/mm)	20	(0.36)					

**Tinned Copper** 

Black Thermoplastic Elastomer 0.300

Electrical Specifications								
Performance Property	Units	US	(metric)					
Velocity of Propagation	%	85						
Dielectric Constant	NA	1.38						
Time Delay	nS/ft (nS/m)	1.20	(3.92)					
Impedance	ohms	50						
Capacitance	pF/ft (pF/m)	23.9	(78.4)					
Inductance	uH/ft (uH/m)	0.060	(0.20)					
Shielding Effectiveness	dB	>90						
DC Resistance								
Inner Conductor	ohms/1000ft (/km)	2.96	(9.7)					
Outer Conductor	ohms/1000ft (/km)	2.21	(7.3)					
Voltage Withstand	Volts DC	2000						
Jacket Spark	Volts RMS	5000						
Peak Power	kW	10						

Part Description							
Part Number	Application	Jacket	Color	Stock Code			
LMR-300-UF	Indoor/Outdoor	TPE	Black	54088			

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					



#### Attenuation vs. Frequency (typical) 100.0 Attenuation (db per 100 feet) 10.0 1.0 100 1,000 10 10,000 Frequency (MHz) 50 150 450 900 1500 Frequency (MHz) 30 220 1800 2000 2500 5800 Attenuation dB/100 ft 1.3 1.6 2.9 3.5 5.1 7.3 9.5 10.5 11.1 12.5 19.8 5.4 Attenuation dB/100 m 4.2 9.4 23.8 31.2 34.4 36.4 41.0 11.5 16.6 65.0 Avg. Power kW 1.74 1.35 0.77 0.63 0.44 0.30 0.23 0.21 0.20 0.18 0.11 Calculate Attenuation = (0.230316) • √ FMHz + (0.000392) • FMHz (interactive calculator available at 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

Connect	tors	Part	Stock	VSW	/R**	Coupling	Inner Contact	Outer Contact	Finish* Body	14	ength	W	idth	We	eight
Interface	Description	Number	Code	Freq. (		Nut	Attach	Attach	/Pin		(mm)	in	(mm)		(g)
1. SMA Male	Straight Plug	TC-300-SM	3190-501	<1.25:1	(2.5)	Hex	Solder	Crimp	SS/G	1.0	(25)	0.35	(8.9)	0.018	(8.2)
2. SMA Female	Bulkhead Jack	TC-300-SF-BH	3190-590	<1.25:1	(2.5)	NA	Solder	Crimp	SS/G	1.1	(28)	0.31	(7.9)	0.022	(10.0)
3. TNC Male	Straight Plug	TC-300-TM	3190-500	<1.25:1	(2.5)	Knurl	Solder	Crimp	N/S	1.7	(43)	0.59	(15.0)	0.050	(22.7)
4. N Male	Right Angle	TC-300-NMH-RA-D	3190-2761	<1.25:1	(2.5)	Knurl	Solder	Crimp	N/G	1.7	(43)	0.59	(15.0)	0.050	(22.7
	* Finish metals	s: N=Nickel, S=Silve	r, G=Gold, S	S=Stainle	ss Ste	el, A=Alballo	y **VSWR	spec base	ed on 3 foo	t cabl	e with a	conne	ctor pa	ir	

## **Hardware Accessories**

Туре	Part Number	Stock Code	Description
Ground Kit	GK-S300T	GK-S300T	Standard Ground Kit (each)



# Install Tools CCT-02 3192-165



Туре	Part Number	Stock Code	Description	
Crimp Tool	CT-400/300	3190-666	Crimp tool for LMR-300 UF connectors	
Cutting Tool	CCT-02	3192-165	Cable end flush cut tool	
Replacement Blade	RB-02	3192-166	Replacement blade for cutting tool	