

LOW LOSS ULTRA FLEXIBLE CABLE LMR240

(CABLE GROUP 0.240/50)

Application:

This LMR240-UF type cable can be considered as an alternative to equivalent diameter corrugated cables.

The foam dielectric provides excellent loss and low return loss levels. The double screen construction (Aluminium foil + tinned copper braid) offers a high level of shielding as well as low leakage. This cable will be advised for feeder and jumper assemblies in cellular networks as well as applications requiring easy routing.



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CONSTRUCTION / DIMENSIONS			
	material	mm	inches
Center conductor	Bared copper	1.42	0.056
Dielectric	Foam PE (1)	3.81	0.150
Inner shield	AL (3) foil	3.94	0.155
Outer shield	TC (3) braid	4.52	0.178
Jacket black	Black PE(1)	6.10	0.240

- (1) PE = Polyethylene
(2) AL = Aluminium
(3) TC = Tinned Copper

MECHANICAL CHARACTERISTICS		
recommended minimum bending radius	19.1 mm	0.75 inch
weight	50 g / m	0.034 lbs / ft

ENVIRONMENTAL CHARACTERISTICS		
operating temperature range	-40 / +85 °C	-40 / +185 °F
fire resistance	no	
halogen free	no	

ELECTRICAL CHARACTERISTICS		
characteristic impedance	50Ω ± 2Ω	
operating frequency range	DC – 6 GHz	
shielding effectiveness	>90 dB	
voltage withstanding	1 500 V rms	
peak power	5.0 kW	
capacitance	80.3 pF / m	24.5 pF / ft
velocity of propagation	83 % (4.0 ns / m)	

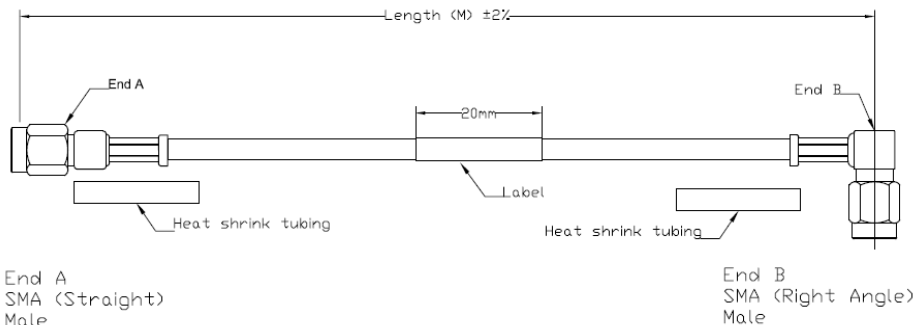
Note: typical VSWR for the cable assembly
VSWR=1.2:1 @3GHz

FREQUENCY / ATTENUATION MAX POWER (sea level / 25 °C)			
GHz	dB/ m	dB / ft	Watts
0.1	0.10	0.04	600
0.5	0.20	0.06	300
1.0	0.30	0.10	210
1.5	0.39	0.12	170
2.0	0.45	0.14	140
2.5	0.51	0.16	130
3.0	0.55	0.17	120
4.0	0.65	0.19	100
5.0	0.73	0.22	90
6.0	0.81	0.25	80
attenuation calculation (dB/m)	(0.292 x √f GHz) + (0.0033 x f GHz)		

Note: typical attenuation for a couple of connectors
(dB) = 0.045 x √f (GHz)

CUSTOM CABLE ASSEMBLY REQUIREMENT

- TYPE COAX CABLE
- CONNECTOR ON END A
- CONNECTOR ON END B
- LENGTH: Standard = overall length (or please specify if length between references planes)
 - length tolerance (standard = ±2%)



CONNECTOR SELECTION (FOR LMR240-UF CABLE)

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SKU	Connector Type Series	Interface	Frequency (GHz)	Impedance (Ω)	Classic level (Mil Spec)
01-0365	N	Male Straight, Crimp, Hex	6	50	Commercial
01-0324	N	Male Straight, Crimp, Hex	6	50	Commercial
01-0341	N	Male Right Angle, crimp	6	50	Commercial
01-0334	N	Female Straight, Crimp,	6	50	Commercial
01-0333	N	Female, Bulkhead, Straight, Crimp	6	50	Commercial
01-0417	SMA	Male Straight, Crimp	11	50	Commercial
01-0408	SMA	Female Straight, Crimp,	11	50	Commercial
01-0453	SMA	Male straight, Reversed polar,	6	50	Commercial
01-0456	SMA	Female straight, Reversed polar,	6	50	Commercial
01-0508	TNC	Male Straight, Crimp	6	50	Commercial
01-0527	TNC	Female straight, crimp,	6	50	Commercial
01-0520	TNC	Revered polar Male Straight, Crimp	6	50	Commercial
01-0206	BNC	Male Straight, Crimp	4	50	Commercial
01-0207	BNC	Female, Bulkhead, Straight, Crimp	4	50	Commercial

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