

LOW LOSS FLEXIBLE CABLE LMR100

(CABLE GROUP 0.100/50)



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CONSTRUCTION / DIMENSIONS

	material	mm	inches
Center conductor	Solid BCCS(1)	0.46	0.018
Dielectric	Solid PE (2)	1.52	0.06
Inner shield	AL (3) foil	1.65	0.065
Outer shield	TC (4) braid	2.11	0.083
Jacket black	Black PE(2)	2.79	0.110

- (1) Bare Copper clad steel
- (2) PE = Polyethylene
- (3) Al = Aluminium
- (4) TC = Tinned Copper

MECHANICAL CHARACTERISTICS

Bending radius: Install	6 mm	0.25 inch
Bending radius: Repeat	25.4 mm	1.0 inch
weight	14 g / m	0.0091 lbs / ft

ENVIRONMENTAL CHARACTERISTICS

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

Application:

This LMR100 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.

ELECTRICAL CHARACTERISTICS

characteristic impedance	50Ω ± 2Ω	
operating frequency range	DC – 6 GHz	
shielding effectiveness	>90 dB	
voltage withstanding	500 V rms	
peak power	0.6 kW	
capacitance	101.1 pF / m	30.8 pF / ft
velocity of propagation	66 % (5.05 ns / m)	

Note: typical VSWR for the cable assembly
VSWR=1.3:1 @3GHz

FREQUENCY / ATTENUATION

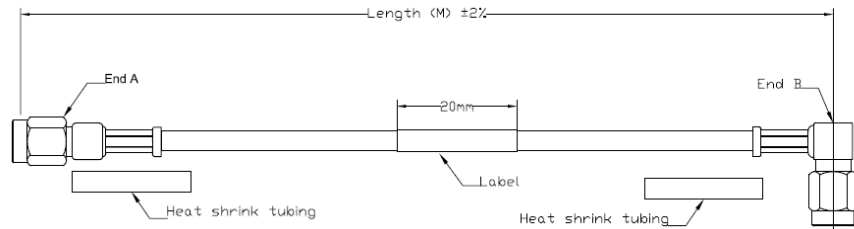
MAX POWER (sea level / 25 °C)

GHz	dB/ m	dB / ft	Watts
0.15	0.30	0.09	180
0.22	0.36	0.11	100
0.45	0.52	0.16	83
0.9	0.75	0.23	57
1.5	0.99	0.30	39
1.8	1.09	0.33	29
2.0	1.15	0.35	25
2.5	1.30	0.40	22
5.8	2.10	0.64	13
8.0	2.54	0.77	10
attenuation calculation (dB/m)	(0.71 x √f GHz) + (0.017 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%)



End A
SMA (Straight)
Male

End B
SMA (Right Angle)
Male