

150 SERIES

The 150 series cable assemblies are specifically designed to operate up to 40 GHz using precision 2.9 mm connectors. These double shielded cables feature an expanded PTFE dielectric, type F-6 per MIL-C-17 and are available with internal ruggedisation, or external protection options.



Cable specifications

P/N	CABLE DIA (mm)	BEND RADIUS (mm)	WEIGHT (Kg/100Mtrs.)	CAPACITANCE (pF/Mtr.)	TIME DELAY (nS/Mtr.)	VP (%)	CUT OFF FREQ. (GHz)	RF LEAKAGE to 18 GHz
1501	3.81	19	3.28	79	3.94	83	45	>100dB
1503*	5.08	12.7	7.7	79	3.94	83	45	>100dB

*Internally ruggedised cable - Crush resistant to 16.9 N-m.
Temperature range: -55°C to +85°C.

For phase vs temperature and phase vs flexing characteristics see page 30.

Cable assembly electrical specifications

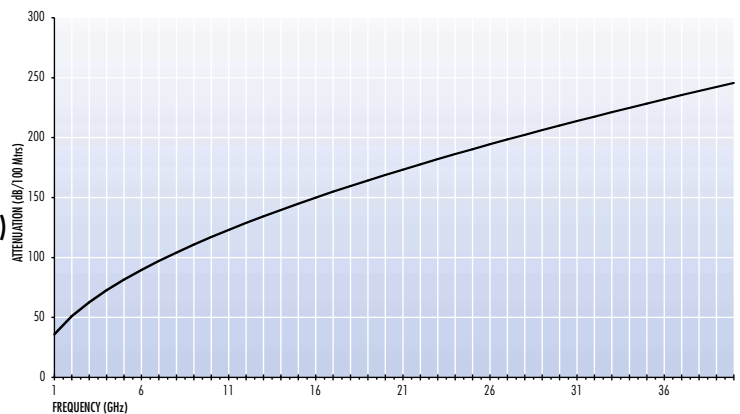
VSWR

1.35:1 to 40 GHz for assemblies with two straight 2.9mm connectors.

Connector insertion loss (per connector)

Connector type: 2.9mm
Max frequency (GHz): 40
Straight (dB): .01xF
Right angle (dB): N/A

Attenuation in dB/100Mtrs 150 Series Cable

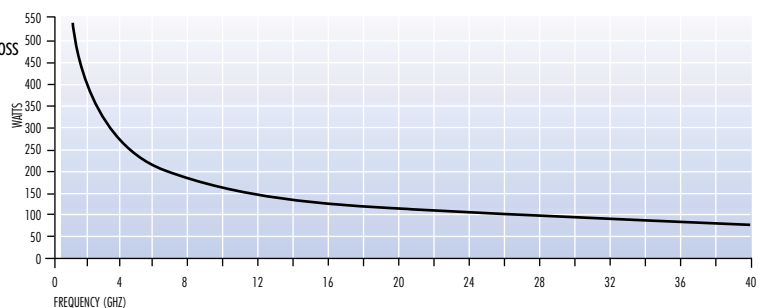


Calculation of cable assembly loss

$$\text{dB} = \frac{\text{cable attenuation in dB/100Mtrs}}{100,000} \times L + \text{connector loss}$$

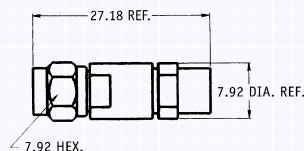
where L is length in millimetres

Max power at 20°C at sea level 150 Series Cable

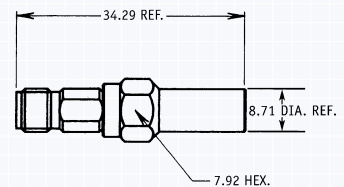


Connectors for 1501 cable

2.9MM STR PLUG

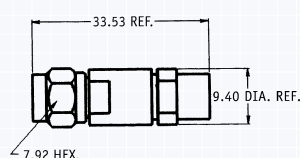


2.9MM STR JACK



Connectors for 1503 cable

2.9MM STR PLUG



2.9MM STR JACK

