

# 140 SERIES

The 140 series cable assemblies are specifically designed to operate up to 50 GHz using precision 2.4 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
1401	3.56	19.0	2.83	78.7	3.94	83	52	>100dB
1403*	4.82	12.7	7.14	78.7	3.94	83	52	>100dB

\*Internally ruggedised cable - Crush resistant to 16.94 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

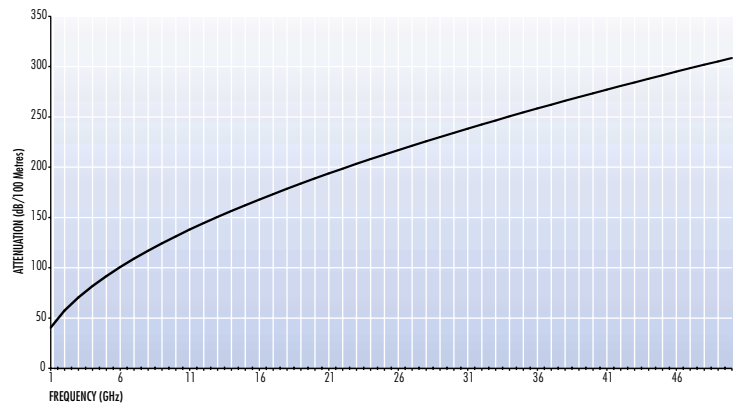
### VSWR

1.40:1 to 50 GHz for assemblies with two straight 2.4mm connectors.

### Connector insertion loss (per connector)

Connector type: 2.4mm  
 Max frequency (GHz): 50  
 Straight (dB): .01x $F$   
 Right angle (dB): N/A

## Attenuation in dB/100Mtrs 140 Series Cable

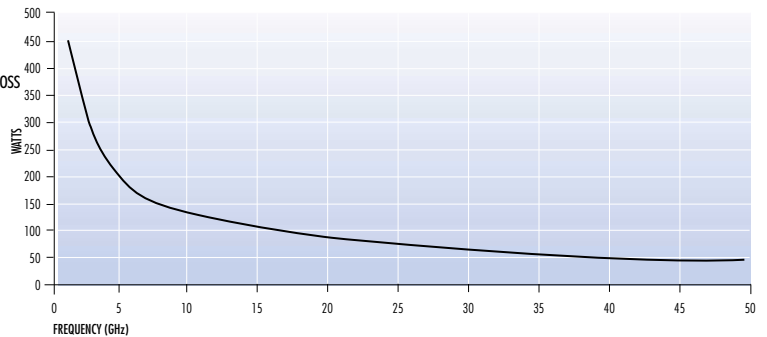


## Calculation of cable assembly loss

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

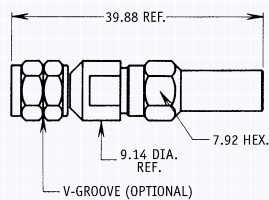
where L is length in millimetres

## Max power at 20°C at sea level 140 Series Cable

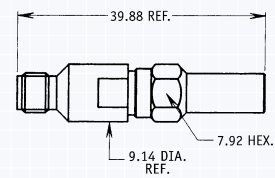


## Connectors for 1401 cable

### 1401 2.4 mm STR PLUG

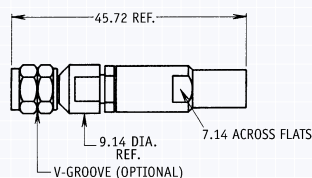


### 1401 2.4 mm STR JACK



## Connectors for 1403 cable

### 1403 2.4 mm STR PLUG



### 1403 2.4 mm STR JACK

