

Construction

Items	Material & Finish	Out Diameter (mm/inch)		Remark
Center Conductor	SPC	0.51 mm	0.020 inch	Solid
Dielectric	e-PTFE	1.65	0.065	
Outer Conductor	SPC	1.82	0.072	Tape Braid
Inter Layer	Aluminum Foil	1.90	0.075	Wrap Tape
Outer Shield	Stainless Steel Wire	2.12	0.083	Braid
Jacket	FEP	2.50	0.098	

Electrical & Mechanical Specifications

Contents	Units	Typ.
Characteristic Impedance	Ω	50
Operating Frequency	GHz	Max. DC to 40 GHz
Velocity of Propagation	%	70
Signal Delay	ns/m	4.76
Capacitance	pF/m	95.2
Operating Temperature	°C	-55 ~ +165
Shield Effectiveness	dB	90
Working Voltage	Vrms	1000
Min. Bending Radius (Static)	mm	10

Performance by Frequency

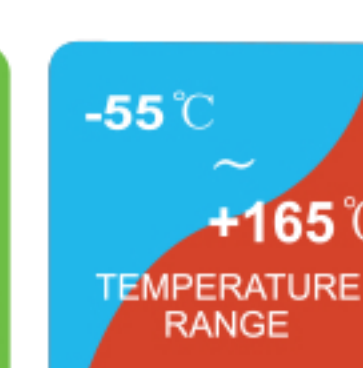
Frequency (MHz)	Max. Attenuation		CW POWER (Watts)	
	(m)	(ft)		
F1	100	0.26	0.079	331
F2	500	0.58	0.178	147
F3	1000	0.83	0.253	103
F4	3000	1.45	0.443	59
F5	6000	2.08	0.633	41
F6	8000	2.41	0.735	36
F7	10000	2.72	0.826	32
F8	15000	3.36	1.023	26
F9	18000	3.70	1.127	23
F10	20000	3.91	1.192	22
F11	26500	4.55	1.386	19
F12	35000	5.28	1.611	16
F13	40000	5.68	1.732	15

Attenuation at Frequency

$$\text{dB}/100\text{m} = K1 \cdot \sqrt{f} (\text{MHz}) + K2 \cdot f (\text{MHz})$$

K1=2.5808091

K2=0.0013000



E086 Assemblies

Flexible Steel Braided Assemblies available with SMA and/or Type-N Connectors in whole inch increments.

