

Ultra-low loss Phase & Amplitude Stable Installation & Interconnection Cable Assemblies

FEATURES

- Low VSWR
- Ultra-low Insertion Loss
- Phase and Amplitude stable
- Wide range of Cable and Connector options
- Customized length and configuration

MAIN APPLICATIONS

- System Interconnections
- Communication Systems
- Avionics
- Radars



CABLE SPECIFICATION

CABLE ASSEMBLY SERIES	IFC10	IFC185	IFC24	IFCA292	IFCB292	IFCC292	IFC35	IFCSMA	IFCAN	IFCBN	IFCCN	
Maximum Frequency (GHz)	110	67	50	40	40	40	32	26.5	18	18	18	
Impedance (Ohms)	50											
VSWR	1.4	1.3	1.25	1.25	1.25	1.2	1.2	1.15	1.2	1.15	1.2	
Insertion Loss*	3 GHz	1.99*L+0.2	1.12*L+0.1	0.82*L+0.1	0.53*L+0.1	0.58*L+0.1	0.66*L+0.1	0.421*L+0.1	0.41*L+0.1	0.24*L+0.1	0.26*L+0.1	0.39*L+0.1
	10 GHz	3.73*L+0.3	2.1*L+0.2	1.53*L+0.2	0.98*L+0.2	1.07*L+0.2	1.23*L+0.2	0.783*L+0.2	0.77*L+0.2	0.44*L+0.2	0.49*L+0.2	0.71*L+0.2
	18 GHz	4.99*L+0.35	2.88*L+0.25	2.08*L+0.25	1.34*L+0.25	1.45*L+0.25	1.67*L+0.25	1.066*L+0.25	1.04*L+0.25	0.61*L+0.25	0.67*L+0.25	0.96*L+0.25
	26.5 GHz	6.12*L+0.45	3.54*L+0.35	2.56*L+0.35	1.65*L+0.35	1.77*L+0.35	2.05*L+0.35	1.308*L+0.35	1.28*L+0.35			
	40 GHz	7.61*L+0.55	4.44*L+0.4	3.19*L+0.4	2.07*L+0.4	2.18*L+0.4	2.56*L+0.4					
	50 GHz	8.57*L+0.65	5.03*L+0.4	3.6*L+0.5								
	67 GHz	10.03*L+0.8	5.93*L+0.4									
	75 GHz	10.66*L+0.9										
110 GHz	13.14*L+1.1											
Phase Stability (°, Typical)	±13	±10	±8	±6	±6	±6	±4	±4	±2	±2	±3	
Amplitude Stability (dB, Typical)	±0.2	±0.15	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.07	±0.07	±0.1	
Velocity of Propagation	80%	82%	82%	82%	82%	82%	83%	83%	83%	83%	83%	
Velocity of Propagation (dB)	>90											
Cable Outer Diameter (mm)	1.85	2.2	3.1	3.9	4.0	3.6	4.8	5.2	8.3	7.9	5.6	
Static Bending Radius (mm)	10	11	15	20	20	18	24	26	41	39	28	
Dynamic Bending Radius (mm)	20	22	31	40	40	36	48	52	83	79	56	
Operating Temperature (°C)	-55~+125		-55~+165									

NOTES

- The electrical specifications provided above are based on tests conducted at the maximum frequency using cable assemblies paired with straight connectors.
- *Insertion Loss depends on the length of the cable assembly (L stands for length using meter as a unit).
- Cable assemblies can be matched in phase, delay, and amplitude.