

### Features

Phase and Amplitude Stable  
 Low VSWR  
 Ruggedized, Crush Resistance and Tensile Resistance  
 Extremely long service life  
 Reinforced Connector  
 Customized Length and Configuration

### Typical Applications

Vector Network Analyzers (VNAs)  
 R&D Laboratory Testing  
 Production Line Testing



### Specifications and Characteristics

Cable Assembly Series	VC185	VC24	VC292	VC35
Maximum Frequency (GHz)	67	50	40	26.5
Impedance (Ohms)	50			
VSWR (Typical)	1.25	1.2	1.15	1.15
VSWR (Maximum)	1.35	1.3	1.25	1.2
Insertion Loss (L stands for cable assembly length. Unit is the Meter)	$5.93*L+0.6$	$3.29*L+0.5$	$2.92*L+0.4$	$2.35*L+0.35$
Phase Stability (°, Typical)	±4	±3	±3	±2
Amplitude Stability (dB, Typical)	±0.08		±0.05	
Velocity of Propagation	81%	75%		
Shielding Effectiveness (dB)	> 100			
Insertion and Unplugging Times of Connector (Typical)	5000	10000	20000	50000
Bending Life of Cable (Typical)	20000	100000	100000	100000
Crush Resistance	145 kgf/cm			
Outer Diameter of Cable (mm)	15.5			
Repeated Bend Radius (mm)	55			
Temperature Range (°C)	0~+28			

#### Notes:

The electrical specifications in this table are based on tests carried out on cable assemblies using straight connectors and tested at maximum frequency. Insertion Loss depends on the length of the cable assembly (L stands for the length of the cable assembly using meter as a unit). Cable assemblies are available in standard lengths of 25 in (0.64 m), 36 in (0.92 m), 48 in (1.22 m) or customized.

### Features

Phase and Amplitude Stable  
 Low VSWR  
 Flexible  
 Ruggedized, Crush Resistance and Tensile Resistance  
 Extremely long service life  
 Adapt to Reinforced Connector  
 Customized Length and Configuration

### Typical Applications

Vector Network Analyzers (VNAs)  
 RF & Microwave Instruments  
 R&D Laboratory Testing  
 Production Line Testing  
 Environmental Chamber Testing  
 Microwave Anechoic Chamber Testing  
 Field or Out-field Testing



### Specifications and Characteristics

Cable Assembly Series	PC10	PC185	PC24	PCA292	PCB292	PCA35	PCB35	PCN
Maximum Frequency (GHz)	110	67	50	40	40	26.5	26.5	18
Impedance (Ohms)	50							
VSWR (Typical)	1.3	1.25	1.2	1.2	1.15	1.2	1.15	1.15
VSWR (Maximum)	1.5	1.35	1.3	1.3	1.25	1.25	1.2	1.2
Insertion Loss (L stands for cable assembly length. Unit is the Meter)	15.96*L+1.0	5.93*L+0.6	3.29*L+0.5	2.71*L+0.4	2.92*L+0.4	1.59*L+0.35	2.35*L+0.35	1.28*L+0.2
Phase Stability (°, Typical)	±10	±7	±5	±4	±3	±3	±3	±2
Amplitude Stability(dB, Typical)	±0.1	±0.08	±0.05	±0.05	±0.05	±0.05	±0.05	±0.03
Velocity of Propagation	80%	81%	74%	81%	74%	82%	74%	82%
Shielding Effectiveness (dB)	> 100							
Insertion and Unplugging Times of Connector (Typical)	1000	5000	10000	20000	20000	50000	50000	50000
Bending Life of Cable (Typical)	3000	20000	100000	100000	100000	100000	100000	100000
Crush Resistance	45 kgf/cm							
Outer Diameter of Cable (mm)	4.3	6.1	6.1	6.7	6.1	8.3	6.1	8.3
Repeated Bend Radius (mm)	30	36	36	60	36	80	36	80
Temperature Range (°C)	-55~+125				-55~+165			

#### Notes:

The electrical specifications in this table are based on tests carried out on cable assemblies using straight connectors and tested at maximum frequency.  
 Insertion Loss depends on the length of the cable assembly (L stands for the length using meter as a unit).  
 Cable assemblies can be matched in phase, delay, and amplitude.

**Features**

- Phase and Amplitude Stable
- Low VSWR
- Economical
- Flexible
- Various Connector Types
- Customized Length and Configuration

**Typical Applications**

- R&D Laboratory Testing
- Production Line Testing
- Microwave Anechoic Chamber Testing
- System Interconnections



**Specifications and Characteristics**

Cable Assembly Series		TC185	TC24	TCA292	TCB292	TCA35	TCB35	TCN
Maximum Frequency (GHz)		67	50	40	40	26.5	26.5	18
Impedance (Ohms)		50						
VSWR (with precision connectors, typical)		1.25	1.2	1.15	1.15	1.15	1.15	1.15
Insertion Loss (L stands for cable assembly length. Unit is the Meter).	3 GHz	1.12*L+0.1	0.77*L+0.1	0.69*L+0.1	0.77*L+0.1	0.48*L+0.1	0.77*L+0.1	0.48*L+0.1
	10 GHz	2.1*L+0.2	1.42*L+0.2	1.28*L+0.2	1.42*L+0.2	0.92*L+0.2	1.42*L+0.2	0.92*L+0.2
	18 GHz	2.88*L+0.25	1.92*L+0.25	1.74*L+0.25	1.92*L+0.25	1.28*L+0.25	1.92*L+0.25	1.28*L+0.25
	26.5 GHz	3.54*L+0.35	2.35*L+0.35	2.13*L+0.35	2.35*L+0.35	1.59*L+0.35	2.35*L+0.35	
	40 GHz	4.44*L+0.4	2.92*L+0.4	2.65*L+0.4	2.92*L+0.4			
	50 GHz	5.03*L+0.5	3.29*L+0.5					
	67 GHz	5.93*L+0.6						
Phase Stability (°, Typical)		±10	±7	±5	±5	±4	±3	±3
Amplitude Stability (dB, Typical)		±0.1	±0.1	±0.1	±0.1	±0.07	±0.05	±0.05
Velocity of Propagation		81%	75%	81%	75%	81%	75%	81%
Shielding Effectiveness (dB)		>90						
Outer Diameter of Cable (mm)		2.4	3.6	4.2	3.6	5.1	3.6	5.1
Single Bend Radius (mm)		12	18	21	18	25	18	25
Repeated Bend Radius (mm)		24	36	42	36	50	36	50
Temperature Range (°C)		-55~+165						

**Notes:**

The electrical specifications in this table are based on tests carried out on cable assemblies using straight connectors and tested at maximum frequency. Insertion Loss depends on the length of the cable assembly (L stands for the length of the cable assembly using meter as a unit). Cable assemblies can be matched in phase, delay, and amplitude.

**Features**

- Low VSWR
- Ultra-low Insertion Loss
- Phase and Amplitude Stable
- Various Connector Types
- Various Cable Types
- Customized Length and Configuration



**Typical Applications**

- Interconnection of Internal Devices
- System Interconnections
- Electronic Countermeasures
- Communication Systems
- Avionics Systems
- Radars

**Specifications and Characteristics**

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 (with precision connectors, typical)		1.4	1.3	1.25	1.25	1.25	1.2	1.2	1.15	1.2	1.15	1.2	
Insertion Loss (L stands for cable assembly length. Unit is the Meter)	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											
Outer Diameter of Cable (mm)		1.85	2.2	3.1	3.9	4.0	3.6	4.8	5.2	8.3	7.9	5.6	
Single Bend Radius (mm)		10	11	15	20	20	18	24	26	41	39	28	
Repeated Bend Radius (mm)		20	22	31	40	40	36	48	52	83	79	56	
Temperature Range (C)		-55~+125					-55~+165						

**Notes:**

The electrical specifications in this table are based on tests carried out on cable assemblies using straight connectors and tested at maximum frequency. 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.