

### P1CA-SAMSAM-SS085-6

SMA Male to SMA Male RF flex cable using SS085 High Performance Coax, 6 inch

#### **Product Features**

P1CA-SAMSAM-SS085-6 is an RF Flex Cable that is part of P1dB's SS085 series, high performance cable assemblies. It is a 6 inch SMA Male to SMA Male cable assembly that utilizes SS085 High Performance coax, which is 0.104 inches in diameter. The SS085 high performance flex cable operates to 27 GHz with a max VSWR of 1.35:1. P1dB's SS085 cable assemblies are high performance RF cables that are dimensionally equivalent to RG405 semi-rigid and 085 conformable coax cables, and have similar electrical specifications to RG405 coax. SS085 RF flex cables can operate up to 50 GHz, depending on the installed connectors. The advantage of SS085 test cables over other test cables are their cost-effective design that still offer good phase and amplitude stability for general purpose test systems.



Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		27.0	
VSWR	DC to 1.0	1:			1.2	
	1.0 to 5.0				1.25	
	5.0 to 10.0				1.3	
	10.0 to 27.0				1.35	
Insertion Loss	DC to 1.0	dB/ft.			0.23	
	1.0 to 5.0				0.52	
	5.0 to 10.0				0.8	
	10.0 to 27.0				1.1	
Velocity Of Propagation		%		70.0		

### Electrical Specification: T Ambient = 25° C

#### **Mechanical And Environmental Specifications:**

Parameter	Description	Notes
Connector 1	SMA Male	
Connector 1 Coupling Nut	Passivated Stainless Steel	
Connector 1 Body	Passivated Stainless Steel	
Connector 1 Contact	Gold Plated Brass	
Connector 2	SMA Male	
Connector 2 Coupling Nut	Passivated Stainless Steel	
Connector 2 Body	Passivated Stainless Steel	
Connector 2 Contact	Gold Plated Brass	
Coax Cable	High Performance	
Cable Type	SS085	
Cable Inner Conductor	SPC	
Dielectric	PTFE	
Shield	1. SPC Ribbon	
	2. SPC Braid	

P1dB. Inc.

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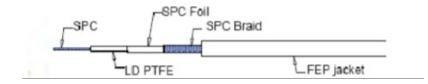


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Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.25	
Length	6.0	
Operating Temprature	-55.0 to 165 °C	
RoHS Compliance	Yes	

### Drawing



### Graph

DIMENSIONS		
Center Conductor Diameter		
(inch)	0.0224	
(mm)	0.57	
Dielectric Diameter		
(inch)	0.064	
(mm)	1.63	
Diameter over Foil		
(inch)	0.07	
(mm)	1.76	
Diameter over Braid		
(inch)	0.085	
(mm)	2.15	
Jacket Diameter		
(inch)	(inch) 0.104	
(mm)	2.64	



## P1CA-SAMSAM-SS085-6

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MATERIAL SPECIFICATIONS					
Jacket	FEP				
Braid	Round silver plat				
Foil	Flat silver plated		copper foil		
Dielectic		LD PTF	E		
Center Conductor	Solid silver plated copper				
ELECTRICAL CHARACTERISTICS					
Impedance		50±2			
Capacitance (Nominal)					
(pF/ft)		29.4			
(pF/m)		96.4			
Velocity of Propagation (%)		80			
Cutt Off Frequency (GHz)		63			
Shielding Effectiveness		>-1100	B		
Max. Attenuation (dB/100Ft)	Attenu		Power		
Max Power (Watts)	dB/100Ft	dB/100M			
400MHz	11.6	38	240		
1GHz	18.3	60	160		
3GHz	33.9	111	80		
5GHz	42.7	140	57		
10GHz	60.1	197	44		
18GHz	82.4	270	33		
25GHz	97.6	320	29		
30GHz	108.3	355	26		
35GHz	118	387	23		
40GHz	129.3	424	22		
45GHz	142.7	468	20		
50GHz	157.1	515	18		
MECHANICAL CHARACTERISTICS	55/ 1000				
Max. Operating Temperature (°C)	-55/ +2				
Min. Bend Radius	Static		Dynamic		
(inch)	0.25		0.6		
(mm)	6.35		15		
Weight		-			
(g/Ft)	6				
(a/M)	19.7				

**Product Notes**