

## P1CA-SAMSAM-SS085-48

SMA Male to SMA Male RF flex cable using SS085 High Performance Coax, 48 inch

#### **Product Features**

P1CA-SAMSAM-SS085-48 is an RF Flex Cable that is part of P1dB's SS085 series, high performance cable assemblies. It is a 48 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.

188 Martinvale Lane, San Jose, CA 95119

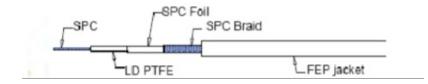


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Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.25	
Length	48.0	
Operating Temprature	-55.0 to 165 °C	
RoHS Compliance	Yes	

## 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)	0.104	
(mm)	2.64	



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MATERIAL SPECIFICATIONS	1			
Jacket	FEP			
Braid	Round silver plat		ed copper	
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		>-110d		
Max. Attenuation (dB/100Ft)	Attenu	ation	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				
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**