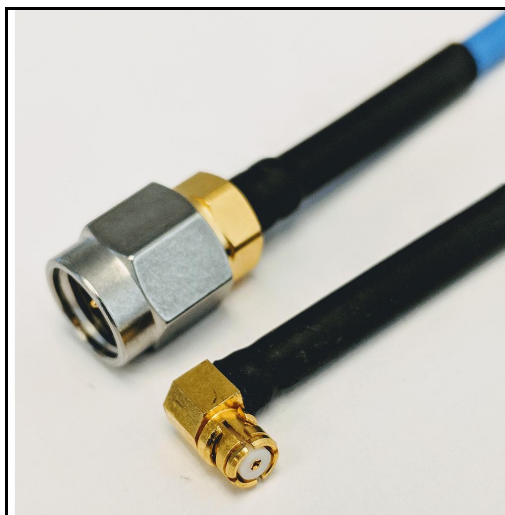


Product Features

P1CA-SAMSPFRA-SS085-9 is an RF Flex Cable that is part of P1dB's SS085 series, high performance cable assemblies. It is a 9 inch SMA Male to SMP Female Right Angle cable assembly that utilizes SS085 High Performance coax, which is 0.104 inches in diameter. The SS085 high performance flex cable operates to 18 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.



Electrical Specification: T_{Ambient} = 25° C

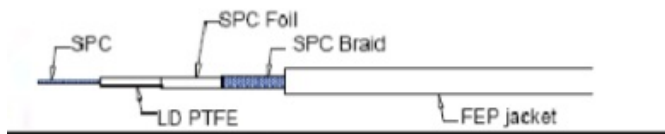
Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		18.0	
VSWR	DC to 1.0	1:			1.2	
	1.0 to 5.0				1.25	
	5.0 to 10.0				1.3	
	10.0 to 18.0				1.35	
Insertion Loss	DC to 1.0	dB/ft.			0.23	
	1.0 to 5.0				0.52	
	5.0 to 10.0				0.8	
	10.0 to 18.0				1.1	
Velocity Of Propagation		%		70.0		

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	SMP Female Right Angle	
Connector 2 Coupling Nut	None	
Connector 2 Body	Gold Plated Beryllium Copper	
Connector 2 Contact	Gold Plated Beryllium Copper	
Coax Cable	High Performance	
Cable Type	SS085	
Cable Inner Conductor	SPC	
Dielectric	PTFE	
Shield	1. SPC Ribbon	
	2. SPC Braid	

Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.25	
Length	9.0	
Operating Temperature	-55.0 to 200.0 °C	
RoHS Compliance	Yes	

Drawing



Graph

MECHANICAL CHARACTERISTICS		
Max. Operating Temperature (°C)	-55/ +200	
Min. Bend Radius	Static	Dynamic
(inch)	0.25	0.6
(mm)	6.35	15
Weight	6	
(g/Ft)	19.7	
(g/M)		

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	
MATERIAL SPECIFICATIONS		
Jacket	FEP	
Braid	Round silver plated copper	
Foil	Flat silver plated copper foil	
Dielectric	LD PTFE	
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	>-110dB	
Max. Attenuation (dB/100Ft)	Attenuation	
Max Power (Watts)	dB/100Ft	Power
400MHz	11.6	240
1GHz	18.3	160
3GHz	33.9	80
5GHz	42.7	57
10GHz	60.1	44
18GHz	82.4	33
25GHz	97.6	29
30GHz	108.3	26
35GHz	118	23
40GHz	129.3	22
45GHz	142.7	20
50GHz	157.1	18

SMA Male to SMP Female Right Angle RF flex cable using SS085 High Performance
Coax, 9 inches long, Operating to 18 GHz.

