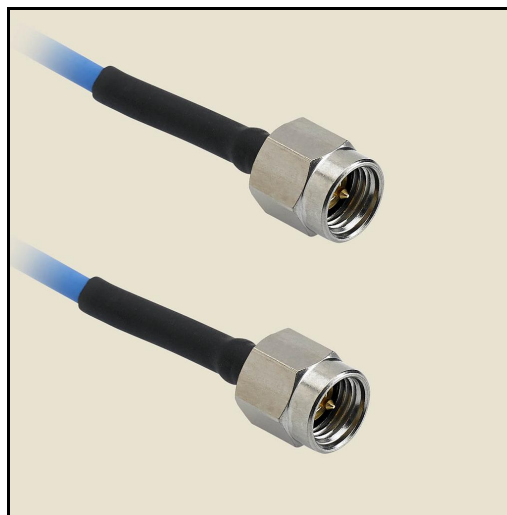


Product Features

P1CA-SAMSAM-SS085-12 is an RF Flex Cable that is part of P1dB's SS085 series, high performance cable assemblies. It is a 12 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.



Electrical Specification: T_{Ambient} = 25° C

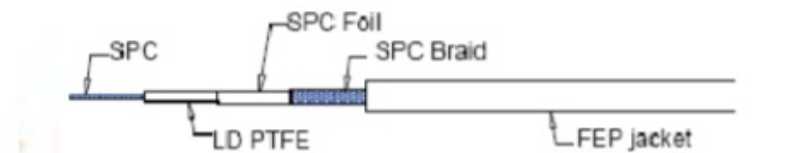
Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		27.0	
VSWR	DC to 1.0	1:			1.2	
	1.0 to 5.0				1.25	
	5.0 to 10.0				1.3	
	10.0 to 27.0				1.35	
Insertion Loss	DC to 1.0	dB/ft.			0.23	
	1.0 to 5.0				0.52	
	5.0 to 10.0				0.8	
	10.0 to 27.0				1.1	
Velocity Of Propagation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

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	

Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.25	
Length	12.0	
Operating Temperature	-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

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)			
Max Power (Watts)			
400MHz		11.6	38
1GHz		18.3	60
3GHz		33.9	111
5GHz		42.7	140
10GHz		60.1	197
18GHz		82.4	270
25GHz		97.6	320
30GHz		108.3	355
35GHz		118	387
40GHz		129.3	424
45GHz		142.7	468
50GHz		157.1	515
MECHANICAL CHARACTERISTICS			
Max. Operating Temperature (°C)		-55/ +200	
Min. Bend Radius		Static	Dynamic
(inch)		0.25	0.6
(mm)		6.35	15
Weight			
(g/Ft)		6	
(g/M)		19.7	

Product Notes