P1CA-SAMSAM-SS085-12

SMA Male to SMA Male RF flex cable using SS085 High Performance Coax, 12 inch



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	

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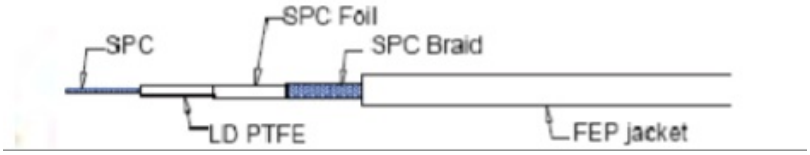
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Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.25	
Length	12.0	
Operating Temprature	-55.0 to 165 °C	
RoHS Compliance	Yes	

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			
Jacket	FEP		
Braid	Round silver plated copper		
Foil	Flat silver plated copper foil		
Dielectic	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		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/ +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

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