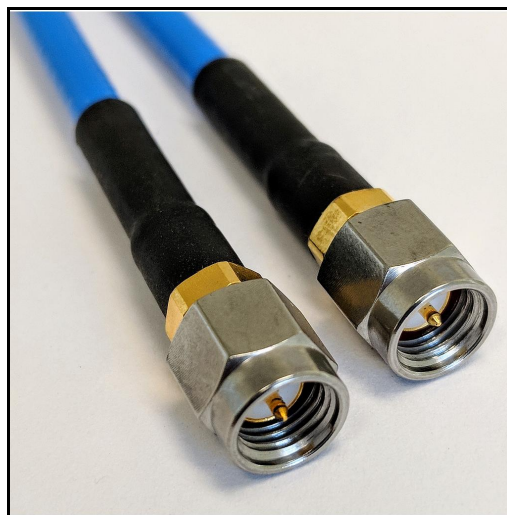


Product Features

P1CA-SAMSAM-SS141-1M is an RF test Cable that is part of P1dB's SS141 series, high performance cable assemblies. It is a 1 meter (39 inch) SMA Male to SMA Male cable assembly that utilizes SS141 High Performance coax, which is 0.163 inches (4.14 mm) in diameter. The SS141 test cable operates to 27 GHz with a max VSWR of 1.35. Insertion Loss is 1.7 dB max for this 1 meter assembly.

P1dB's SS141 cable assemblies are general purpose test cables that are dimensionally equivalent to RG402 semi-rigid and 141 conformable coax cables and RG402 electrical specifications. SS141 test cables can operate up to 40 GHz, depending on the installed connectors. The advantage of SS141 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:			1.1	
	1.0 to 10.0				1.2	
	10.0 to 18.0				1.25	
	18.0 to 27.0				1.35	
Insertion Loss	DC to 1.0	dB/ft.			0.13	
	1.0 to 10.0				0.39	
	10.0 to 18.0				0.52	
	18.0 to 27.0				0.71	
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	SS141	
Cable Inner Conductor	SPC	
Dielectric	PTFE	

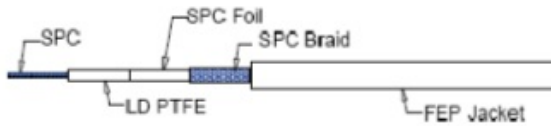


Parameter	Description	Notes
Shield	1. SPC Braid, SPC Ribbon	
Jacket	FEP	
Coax Diameter	0.163	
Minimum Bend Radius	0.08	
Operating Temperature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

Drawing

DIMENSIONS		
Center Conductor Diameter		
(inch)		0.04
(mm)		1.02
Dielectric Diameter		
(inch)		0.116
(mm)		2.95
Diameter Over Foil		
(inch)		0.124
(mm)		3.14
Diameter over Braid		
(inch)		0.136
(mm)		3.46
Jacket Diameter		
(inch)		0.163
(mm)		4.14
MATERIAL SPECIFICATIONS		
Jacket		FEP
Braid		Round silver plated copper
Foil		Flat silver plated copper foil
Dielectric		LD PTFE
Center Conductor		Solid SPC
ELECTRICAL CHARACTERISTICS		
Impedance		50±2
Capacitance (Nominal)		
(pF/ft)		29.4
(pF/m)		96.4
Velocity of Propagation (%)		78
Cutt Off Frequency (GHz)		40
Shielding Effectiveness		> -110dB
Max. Attenuation (dB/100Ft)	Attenuation	
Max Power (Watts)	dB/100Ft	Power
400MHz	7	23
1GHz	11	36
3GHz	18.9	62
5GHz	25.3	83
10GHz	37.5	123
18GHz	51.9	170
25GHz	63.5	208
30GHz	71.4	234
35GHz	78.4	257
40GHz	87.8	288

Graph



Product Notes

Operating temp: -55 to +125 deg C

Bend radius 0.8 inch (20 mm)