

P1CA-SAMNM-SS141-48

SMA Male to N Male test cable using SS141 flexible test cable, 48 inches long, frequency to 18 GHz.

Product Features

P1CA-SAMNM-SS141-48 is a 50 Ohm RF test Cable that is part of P1dB's SS141 series high performance cables. It is a 48 inch SMA Male to N Male cable assembly that utilizes SS141 High Performance coax, which is 0.163 inches in diameter. The SS141 test cable operates to 18 GHz with a max VSWR of 1.35:1. Typical Insertion Loss for a 48 inch assembly is 1.9 dB at 10 GHz and 2.6dB at 18 GHz.

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		18.0	
VSWR	DC to 1.0	1:			1.1	
	1.0 to 5.0				1.2	
	5.0 to 10.0				1.25	
	10.0 to 18.0				1.35	
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	N 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		
Shield	1. SPC Braid, SPC Ribbon		
Jacket	FEP		
Coax Diameter	0.163		
Length	48.0		
Operating Temprature	-55.0 to 125.0 °C		

188 Martinvale Lane, San Jose, CA 95119



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Parameter	Description	Notes
RoHS Compliance	Yes	
Drawing		
DIMENSIONS		
Center Conductor Diameter		
(inch)	0.037	
(mm)	0.94	
Dielectric Diameter		
(inch)	0.117	
(mm)	2.96	
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	
Dielectic	Solid PTFE	
Center Conductor	Solid SPC	

Graph



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ELECTRICAL CHARACTERISTICS	50±2			
		5012		
Capacitance (Nominal)		20.4		
(pF/ft)	29.4			
(pF/m)	96.4			
Velocity of Propagation (%)	70			
Cutt Off Frequency (GHz)	40			
Shielding Effectiveness	>-110dB			
Max. Attenuation (dB/100Ft)	Attenuation		Power	
Max Power (Watts)	dB/100Ft	dB/100M		
400MHz	8	26.24	1100	
1GHz	13	42.6	550	
3GHz	23	75.4	350	
5GHz	30	98.4	245	
10GHz	45	147.6	140	
18GHz	64	209.9	87	
25GHz	78	255.8	75	
30GHz	87	285.4	68	
35GHz	96	314.9	61	
40GHz	104	341.1	56	
MECHANICAL CHARACTERISTICS				
Max. Operating Temperature (°C)	-55/ +200			
Min. Bend Radius	Static		Dynamic	
(inch)	0.4		1.57	
(mm)	10		40	
Weight				
(g/Ft)	13.5			
(g/M)	44.3			

Product Notes