

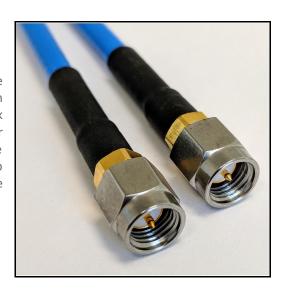
### P1CA-SAMSAM-SS141-48-PM

RF cable assembly, SMA Male to SMA Male, SS141 flexible coaxial cable, 48 inch. Supplied as TBD # of cables phase matched +/- 5 degrees at 10 GHz, operating to 18 GHz

#### **Product Features**

P1dB's P1CA-SAMSAM-SS141-48-PM is a 50 Ohm RF cable assembly, supplied as TBD # of phase matched cables. It is an SMA male to SMA male cable using P1dB's SS141 flex coax which is a phase stable RF cable with 0.160 inch (4 mm) outer diameter. This cable is 48 inches long and the cables are phase matched to 5 degrees measured at 10 GHz. Operating to 18 GHz, the P1CA-SAMSAM-SS141-48-PM is a low loss flex cable with a minimum bend radius of 0.4 inches.

Typical delivery for a set of phase matched cables is 4 weeks. Maximum VSWR up to 18 GHz is 1.25.



#### **Electrical Specification: T**<sub>Ambient</sub> = 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 10.0				1.2	
	10.0 to 18.0				1.25	
Insertion Loss	DC to 1.0	dB/ft.			0.13	
	1.0 to 10.0				0.45	
	10.0 to 18.0				0.64	
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	
Shield	1. SPC Braid, SPC Ribbon	
Jacket	FEP	
Coax Diameter	0.163	
Minimum Bend Radius	0.8	
Length	48.0	
Operating Temprature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

P1dB, Inc.

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### **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	1 100		
(inch)	0.163		
(mm)	4.14		
MATERIAL SPECIFICATIONS	119 8850 1		
Jacket	FEP		
Braid	Round silver plated copper		
Foil	Flat silver plated copper foil		
Dielectic	Solid PTFE		
Center Conductor	Solid SPC		

### Graph

ELECTRICAL CHARACTERISTICS		50.0		
Impedance	50±2			
Capacitance (Nominal)		10.03000		
(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	

**Product Notes** 

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