

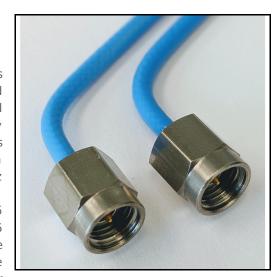


SMA Male to SMA Male cable assembly using ST085 Tight-Flex, Triple Shielded Coax, 20 inch

Product Features

P1CA-STMSTM-ST085-20 is an RF Cable that is part of P1dB's Tight-Flex™ cable assembly series. With a minimum bend radius of 0.2 inch, the cable allows bends at the connector end eliminating the need for a right angle connector. This assembly a 20 inch SMA Male to SMA Male cable assembly that utilizes ST085 Tight-Flex, Triple Shielded coax, which is 0.104 inches in diameter. The Tight-Flex™ cable assembly operates to 18 GHz with a max VSWR of 1.30:1.

Tight-Flex[™] cable assemblies are a flexible version of RG405 semi-rigid and 085 conformable coax cables that meet RG405 dimensional and electrical specifications. Tight-Flex[™] cable assemblies can operate up to 40 GHz, depending on the installed connectors. The advantage of Tight-Flex[™] cables over other 085 flex cables are their triple shielding that add additional RF stability even during tight bends.



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:			1.15	
	1.0 to 5.0				1.2	
	5.0 to 10.0				1.25	
	10.0 to 18.0				1.29	
Insertion Loss	DC to 1.0	dB/ft.			0.21	
	1.0 to 5.0				0.51	
	5.0 to 10.0				0.75	
	10.0 to 18.0				1.04	
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	Tight-Flex, Triple Shielded	
Cable Type	ST085	
Cable Inner Conductor	SPCW	
Dielectric	PTFE	
Shield	1. SPC Tape, Aluminum Tape, SPC Braid	

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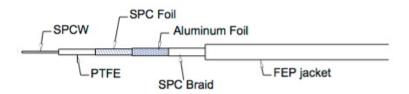


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Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.2	
Length	20.0	
Operating Temprature	-55.0 to 200.0 °C	
RoHS Compliance	Yes	

Drawing



Graph



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DIMENSIONS				
Center Conductor Diameter				
(inch)		0.0201		
(mm)		0.51		
Dielectric Diameter				
(inch)		0.0641		
(mm)	1.63			
Diameter Over Inner Foil (inch)	0.0700			
, , , ,	0.0708			
(mm)		1.80		
Diameter Over Outer Foil				
(inch)		0.0748		
(mm)		1.90		
Diameter over Braid				
(inch)		0.0885		
(mm)		2.25		
Jacket Diameter				
(inch)	0.104			
(mm)	2.64			
MATERIAL SPECIFICATIONS				
		EED/BLUE)		
Jacket		FEP(BLUE)		
Braid	Round Silver Plated Copper			
Outer Foil	Aliminium Tape			
Inner Foil Dielectic	Silver Plated Copper Tape			
	Solid PTFE Solid SPCW			
Center Conductor		Solid SPCVV		
ELECTRICAL CHARACTERISTICS				
Impedance	50±2			
Capacitance (Nominal)				
(pF/ft)	29.4			
(pF/m)	96.4			
Velocity of Propagation (%)	70			
Cutt Off Frequency (GHz)	63			
Shielding Effectiveness	> -110dB			
Max. Attenuation	Attenuati	on	Power	
Max Power (Watts)	dB/100Ft	dB/100M		
400MHz	14	45.9	240	
1GHz	23	75.4	160	
3GHz	39	128	80	
5GHz 10GHz	52 80	170.6 262.4	57 44	
18GHz	110	361	33	
25GHz	131	430	29	
30GHz	146	479	26	
35GHz	160	525	23	
40GHz	173	567	22	
45GHz	183	600	20	
50GHz	195	640	18	

Product Notes

Temp range: -55 to +125 deg C

Minimum bend radius: 0.2 inch (5.1 mm)