

Product Features

P1CA-STMTPF-ST085-5 is an RF Cable that is part of P1dB's Tight-Flex™ cable assembly series. It is a 5 inch SMA Male to SMP Female cable assembly that utilizes ST085 Tight-Flex, Triple Shielded coax, which is 0.104 inches in diameter. This Tight-Flex™ cable assembly operates to 18 GHz with a max VSWR of 1.35.

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

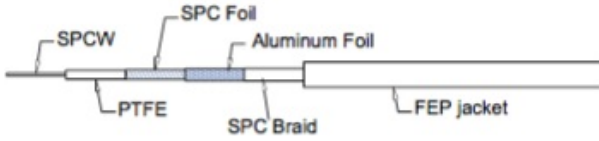
Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		18.0	
VSWR	DC to 1.0	1:			1.15	
	1.0 to 5.0				1.2	
	5.0 to 10.0				1.25	
	10.0 to 18.0				1.35	
Insertion Loss	DC to 1.0	dB/ft.			0.21	
	1.0 to 5.0				0.51	
	5.0 to 10.0				0.75	
	10.0 to 18.0				1.04	
Velocity Of Propagation		%		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	SMP Male	
Connector 2 Coupling Nut	None	
Connector 2 Body	Gold Plated Beryllium Copper	
Connector 2 Contact	Gold Plated Beryllium Copper	
Coax Cable	Tight-Flex, Triple Shielded	
Cable Type	ST085	
Cable Inner Conductor	SPCW	
Dielectric	PTFE	
Shield	1. SPC Tape, Aluminum Tape, SPC Braid	
Jacket	FEP	
Coax Diameter	0.104	

Parameter	Description	Notes
Minimum Bend Radius	0.2	
Length	5.0	
Operating Temperature	-55.0 to 125.0 °C	
RoHS Compliance	Yes	

Drawing



Graph

DIMENSIONS																								
Center Conductor Diameter (inch)	0.0201																							
(mm)	0.51																							
Dielectric Diameter (inch)	0.0641																							
(mm)	1.63																							
Diameter Over Inner Foil (inch)	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																								
Jacket	FEP(BLUE)																							
Braid	Round Silver Plated Copper																							
Outer Foil	Aluminium Tape																							
Inner Foil	Silver Plated Copper Tape																							
Dielectric	Solid PTFE																							
Center Conductor	Solid SPCW																							
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 Max Power (Watts)	<table border="1"> <thead> <tr> <th colspan="2">Attenuation</th> <th rowspan="2">Power</th> </tr> <tr> <th>dB/100Ft</th> <th>dB/100M</th> </tr> </thead> <tbody> <tr> <td>400MHz</td> <td>14</td> <td>240</td> </tr> <tr> <td>1GHz</td> <td>23</td> <td>160</td> </tr> <tr> <td>3GHz</td> <td>39</td> <td>80</td> </tr> <tr> <td>5GHz</td> <td>52</td> <td>57</td> </tr> <tr> <td>10GHz</td> <td>80</td> <td>44</td> </tr> <tr> <td>18GHz</td> <td>110</td> <td>33</td> </tr> </tbody> </table>	Attenuation		Power	dB/100Ft	dB/100M	400MHz	14	240	1GHz	23	160	3GHz	39	80	5GHz	52	57	10GHz	80	44	18GHz	110	33
Attenuation		Power																						
dB/100Ft	dB/100M																							
400MHz	14	240																						
1GHz	23	160																						
3GHz	39	80																						
5GHz	52	57																						
10GHz	80	44																						
18GHz	110	33																						

Product Notes