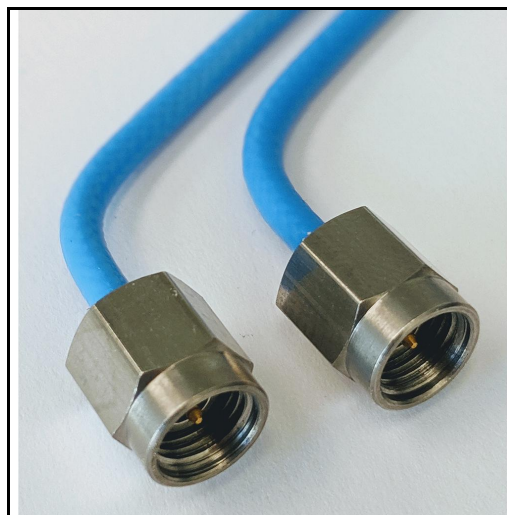


Product Features

P1CA-STMSTM-ST085-16 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 16 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

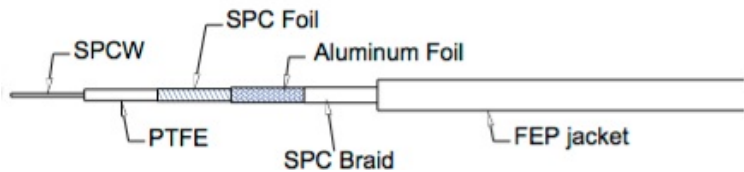
Parameter	Frequency Range	Units	Min	Typical	Max	Notes
Frequency Range		GHz	DC		18.0	
VSWR	DC to 1.0	1:			1.15	
	1.0 to 5.0				1.2	
	5.0 to 10.0				1.25	
	10.0 to 18.0				1.29	
Insertion Loss	DC to 1.0	dB/ft.			0.21	
	1.0 to 5.0				0.51	
	5.0 to 10.0				0.75	
	10.0 to 18.0				1.04	
Velocity Of Propagation		%		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	

Parameter	Description	Notes
Jacket	FEP	
Coax Diameter	0.104	
Minimum Bend Radius	0.2	
Length	16.0	
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><tr><th colspan="2">Attenuation</th><th>Power</th></tr><tr><th></th><th>dB/100Ft</th><th>dB/100M</th><th></th></tr><tr><td>400MHz</td><td>14</td><td>45.9</td><td>240</td></tr><tr><td>1GHz</td><td>23</td><td>75.4</td><td>160</td></tr><tr><td>3GHz</td><td>39</td><td>128</td><td>80</td></tr><tr><td>5GHz</td><td>52</td><td>170.6</td><td>57</td></tr><tr><td>10GHz</td><td>80</td><td>262.4</td><td>44</td></tr><tr><td>18GHz</td><td>110</td><td>361</td><td>33</td></tr><tr><td>25GHz</td><td>131</td><td>430</td><td>29</td></tr><tr><td>30GHz</td><td>146</td><td>479</td><td>26</td></tr><tr><td>35GHz</td><td>160</td><td>525</td><td>23</td></tr><tr><td>40GHz</td><td>173</td><td>567</td><td>22</td></tr><tr><td>45GHz</td><td>183</td><td>600</td><td>20</td></tr><tr><td>50GHz</td><td>195</td><td>640</td><td>18</td></tr></table>	Attenuation		Power		dB/100Ft	dB/100M		400MHz	14	45.9	240	1GHz	23	75.4	160	3GHz	39	128	80	5GHz	52	170.6	57	10GHz	80	262.4	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
Attenuation		Power																																																						
	dB/100Ft	dB/100M																																																						
400MHz	14	45.9	240																																																					
1GHz	23	75.4	160																																																					
3GHz	39	128	80																																																					
5GHz	52	170.6	57																																																					
10GHz	80	262.4	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)