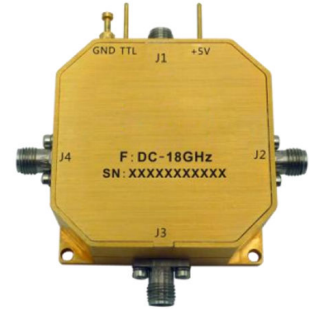




Wide Band Coaxial DPDT Switch DC - 18GHz

Features

- Ultra Wide Band Operation DC-18GHz
- TTL compatible driver included
- Fast Switching Speed
- Low Insertion Loss and High Isolation



Typical Applications

- Wireless Infrastructure
- Test and measurement Instrument
- Fiber Optics

RF Microwave & VSAT

5G communication

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range (Note 1)	DC-6		6-12		12-18					GHz
Insertion Loss		1.5	2.2		2.2	3.0		3.5	4.0	dB
Insertion Loss Temperature Coefficient		0.003			0.003			0.003		dB/ ° C
Isolation	40	45		40	45		40	45		dB
Input VSWR		1.3	1.8		1.6	1.8		1.6	2.0	: 1
Output VSWR		1.3	1.8		1.7	1.8		1.6	2.0	: 1
Max RF Input power (Note 2)			40			40			40	dBm
DC Power Dissipation		0.8			0.8			0.8		W
0.1dB Compression Point (P0.1dB)		40			40			40		dBm
IIP3		48			48			48		dBm
Switching Speed	500 Typ.									ns
Weight	7.0Max.									ounce s
Impedance	50									Ω
Bias Current (+5V)	150 Typ.									mA
Input / Output Connectors	SMA-Female									
Finish	Gold Plated									
Material	Aluminum									
Sealing	Hermetically Sealed (Optional)									



Absolute Maximum Ratings

Biassing	+5V ± 10%
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Ordering Information

Part No.	Description
DBDS0400001800A	DPDT DC-18GHZ PIN Diode Switch

Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

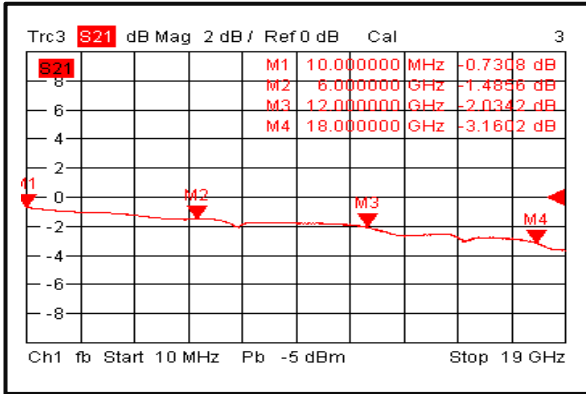
Outline Drawing:

All Dimensions in mm (inches) Housing Tolerances ± 0.1 (0.004)

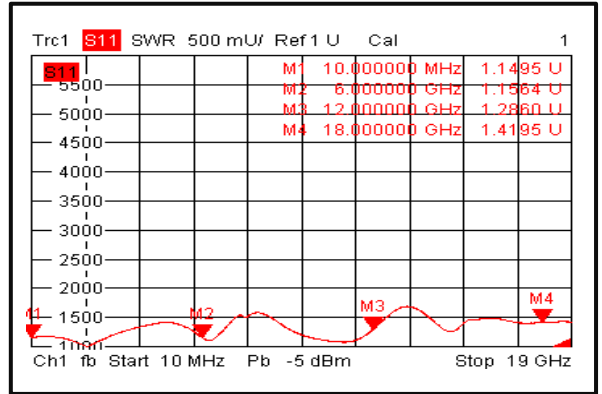
TTL Control Voltage THRESHOLD	Signal Path State	
Low(0)=0~0.8V		
High(1)=2.8~5V		
Control Input TTL	Signal Path State	
0	J1-J2(IL state) J3-J4(IL state)	J1-J4(ISO state) J2-J3(ISO state)
1	J1-J2(ISO state) J3-J4(ISO state)	J1-J4(IL state) J2-J3(IL state)
Control Pin Customization available upon request		



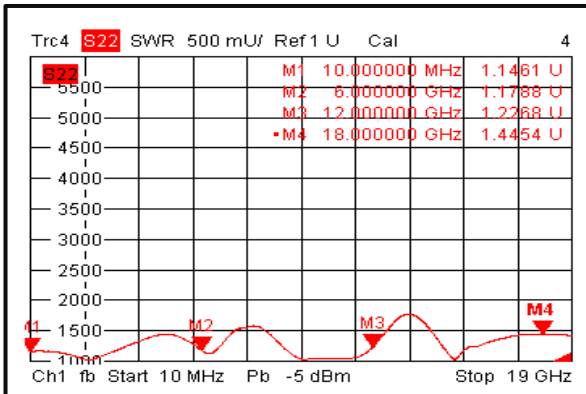
Insertion Loss @+25°C



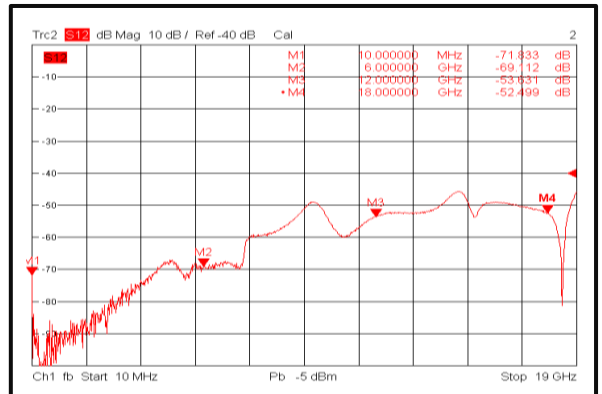
Input VSWR @+25°C



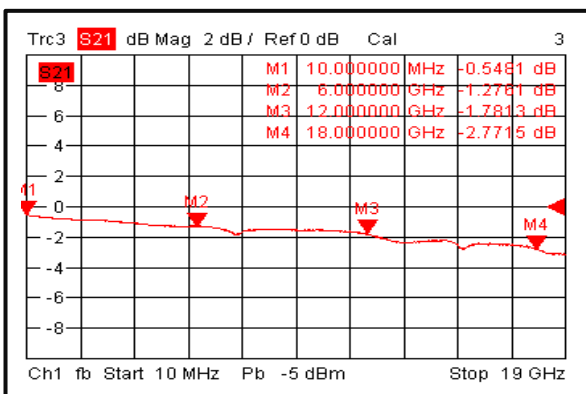
Output VSWR @+25°C



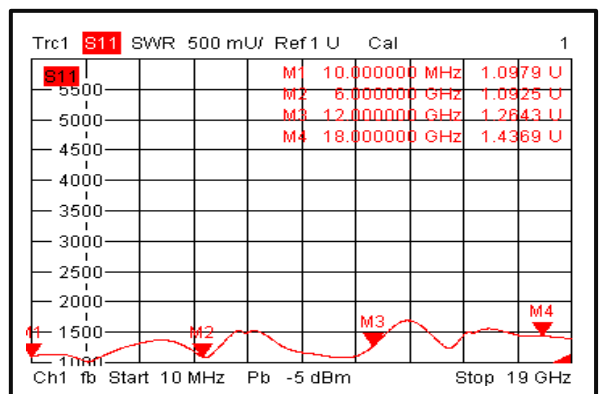
Isolation @+25°C



Insertion Loss @-40°C

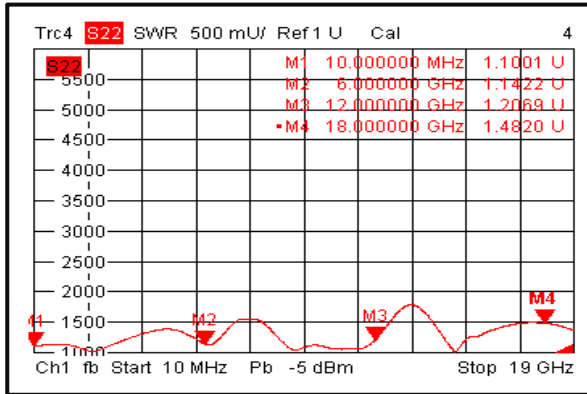


Input VSWR @-40°C

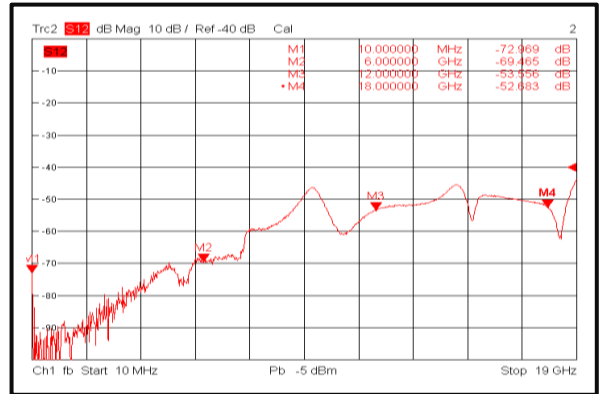




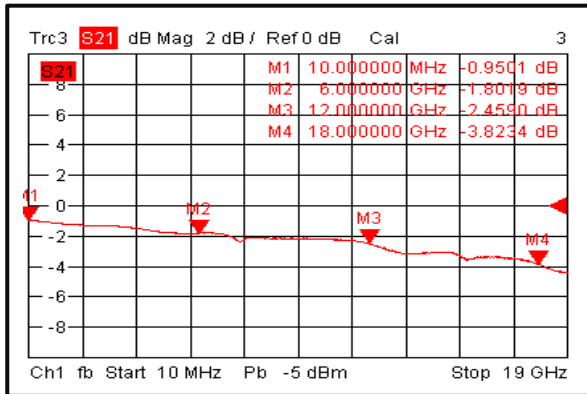
Output VSWR @-40°C



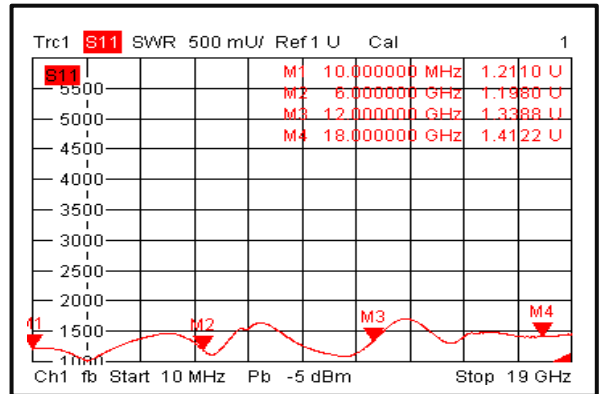
Isolation @-40°C



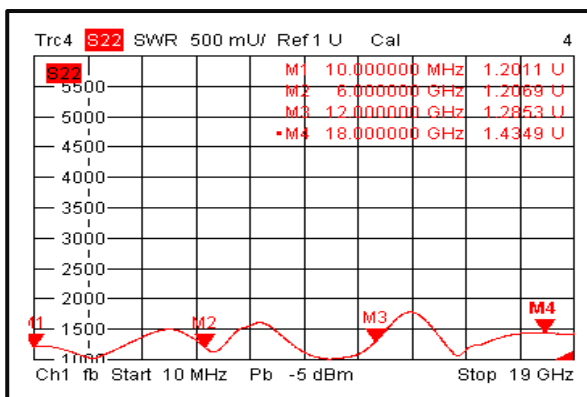
Insertion Loss @+85°C



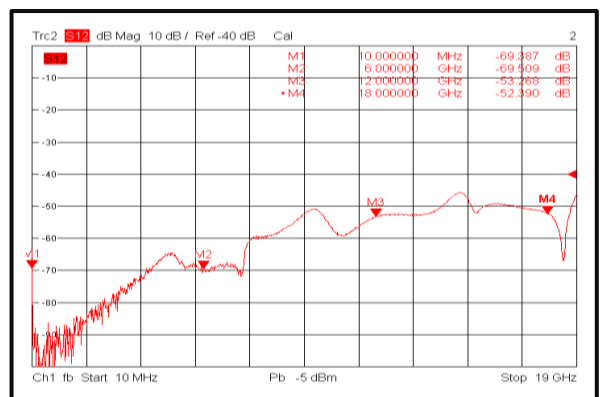
Input VSWR @+85°C



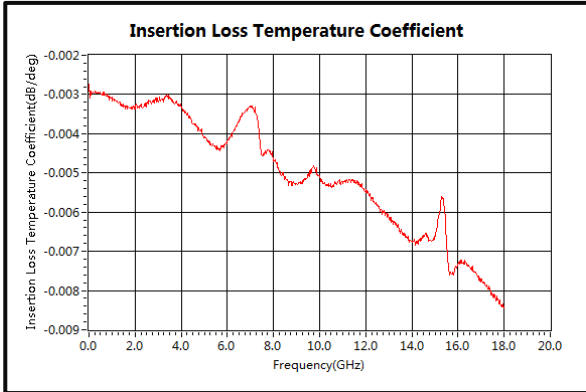
Output VSWR @+85°C



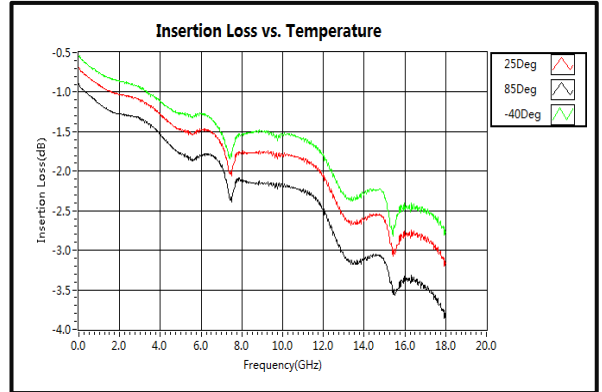
Isolation @+85°C



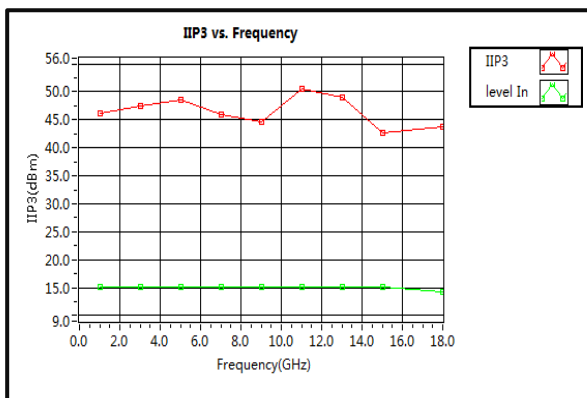
Insertion Loss Temperature Coefficient



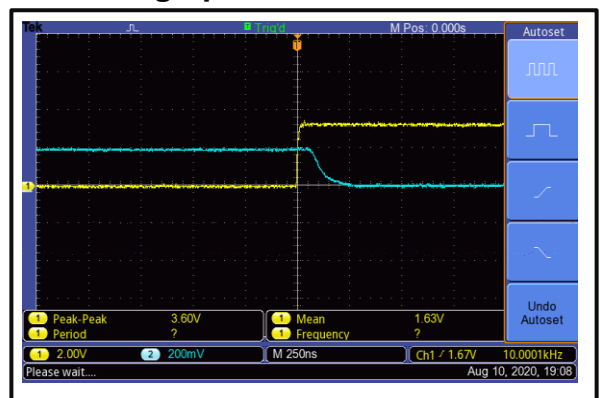
Insertion Loss vs. Temperature



IIP3



Switching Speed



Switching Speed

