

**Model: TLSPDT1G18GA**
**Absorption, Broadband GaAs MMIC Switch  
 1-18 GHz, SPDT, SMA**
**Feature:**

- Ultra Wide Band: 1-18 GHz
- Low Insertion Loss: 2.5 dB Typ
- Power Handling : 27 dBm
- High Isolation
- Switch Type: Absorption

**Electrical Specifications:**

Parameter	Min	Typ	Max	Units
Frequency range	1-18			GHz
Insertion Loss		2.5	4.5	dB
Isolation		70		dB
Switch Speed		50	100	ns
Input VSWR		1.5		:1
Output VSWR		1.5		:1
Input RF Power			27	dBm
DC Voltage		-5		V DC
DC Supply Current		20		mA
Control Logic TTL	"0"=Low(0V) ; "1"=High(+5V)			V
Impedance	50			Ohms

**Mechanical Specifications:**

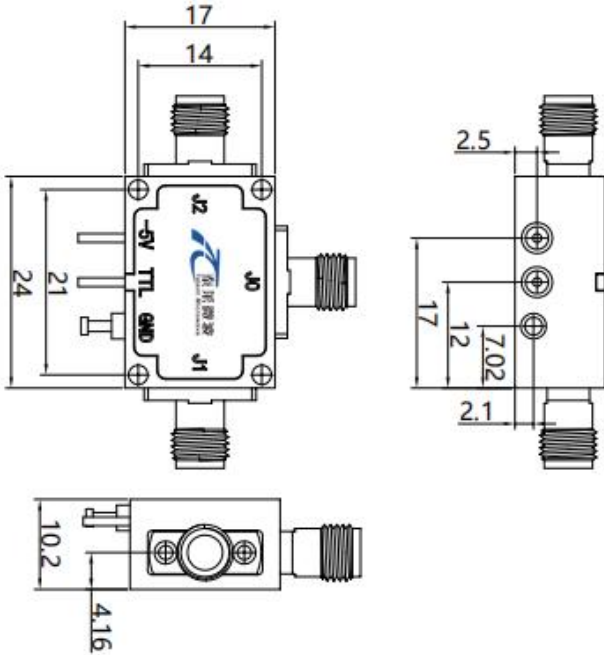
Parameter	Value	Units
Input /Output Connector	SMA Female	
Control Bias	Solder Pin	
Weight	≤200	g

**Absolute Maximum Ratings:**

Parameter	Value
Supply Bias Voltage	-5V±5%
RF Input Power	27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

**Outline Drawing:**

Unit: mm(Inches)



Truth Table	
TTL Control Input	Signal Path State
0	J0-J1
1	J0-J2



**Environmental Conditions:**

Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

**Ordering Information:**

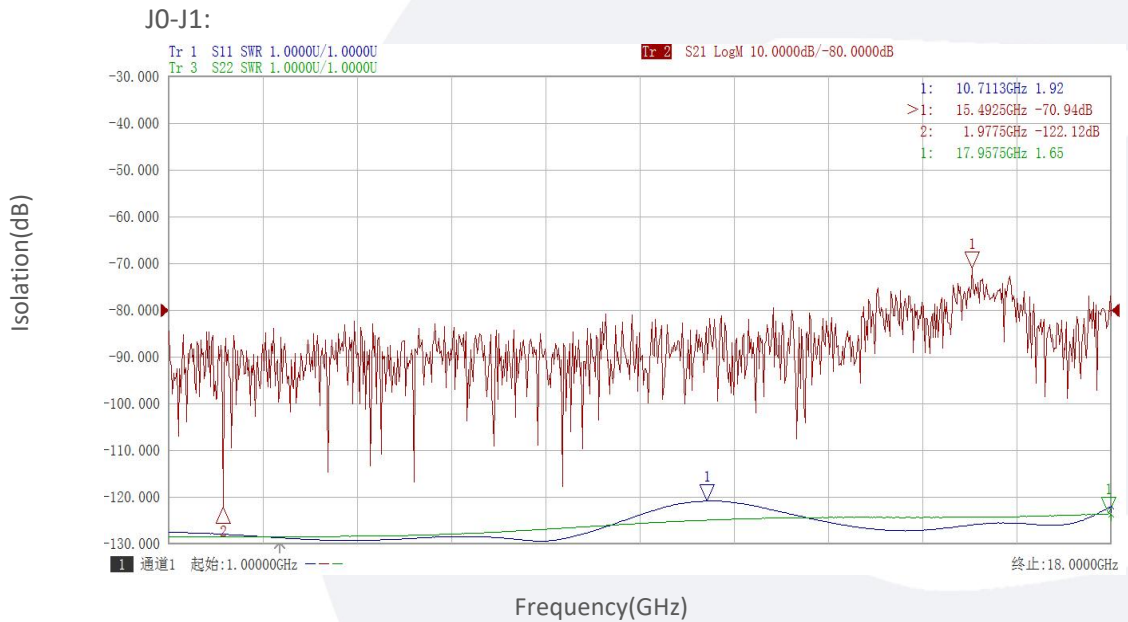
Part Number	Description	Revision
TLSPDT1G18GA	Absorption,Broadband GaAs MMIC Switch 1-18 GHz,SPDT,SMA	Rev.1.1

Typical Performance Data:

Insertion Loss&VSWR vs Frequency

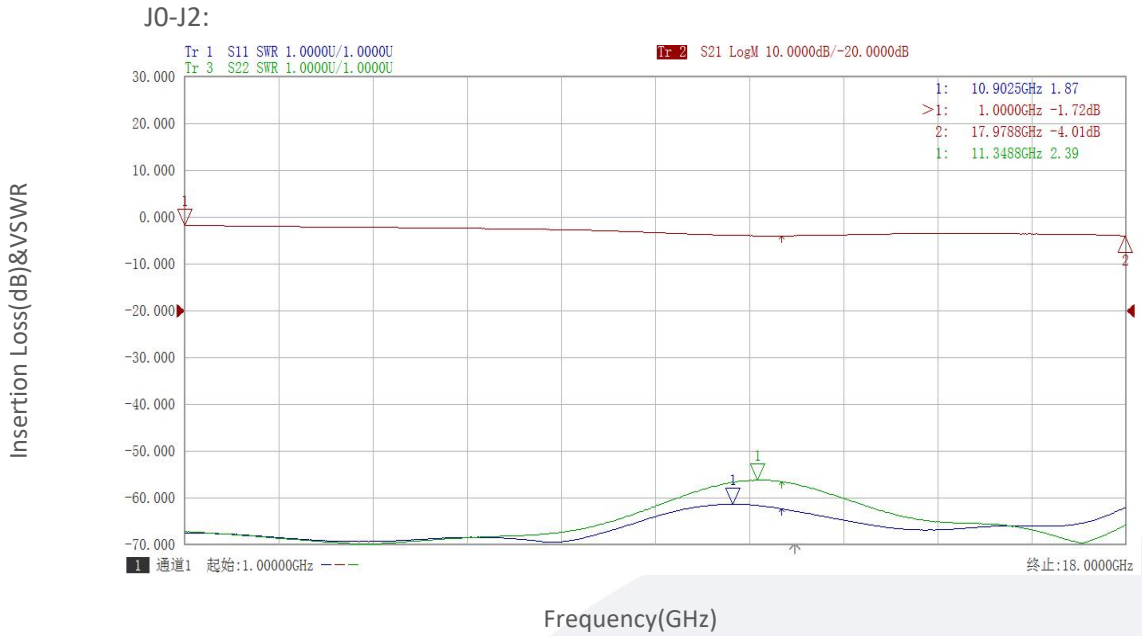


Isolation vs Frequency



Typical Performance Data:

Insertion Loss&VSWR vs Frequency



Isolation vs Frequency

