

**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

**电气特性 Electrical Specifications:**

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	1-18			GHz
插损 Insertion Loss		2.5	4.5	dB
隔离 Isolation		70		dB
切换速度 Switch Speed		50	100	ns
输入驻波 Input VSWR		1.5		:1
输出驻波 Output VSWR		1.5		:1
最大输入功率 Input RF Power			27	dBm
直流电压 DC Voltage		-5		V DC
直流电流 DC Supply Current		20		mA
控制电平 Control Logic TTL	"0"=Low(0V) ; "1"=High(+5V)			V
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

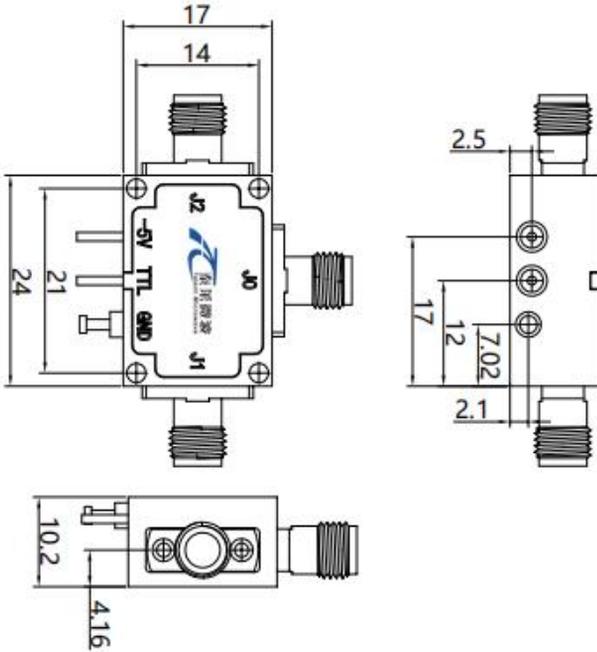
参数 Parameter	指标 Value	单位 Units
输入输出接口 Input /Output Connector	SMA Female	
直流控制接口 Control Bias	Solder Pin	
重量 Weight	≤200	g

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	-5V±5%
输入功率 RF Input Power	27 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm(Inches)



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



温度环境 Environmental Conditions:

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

订货信息 Ordering Information:

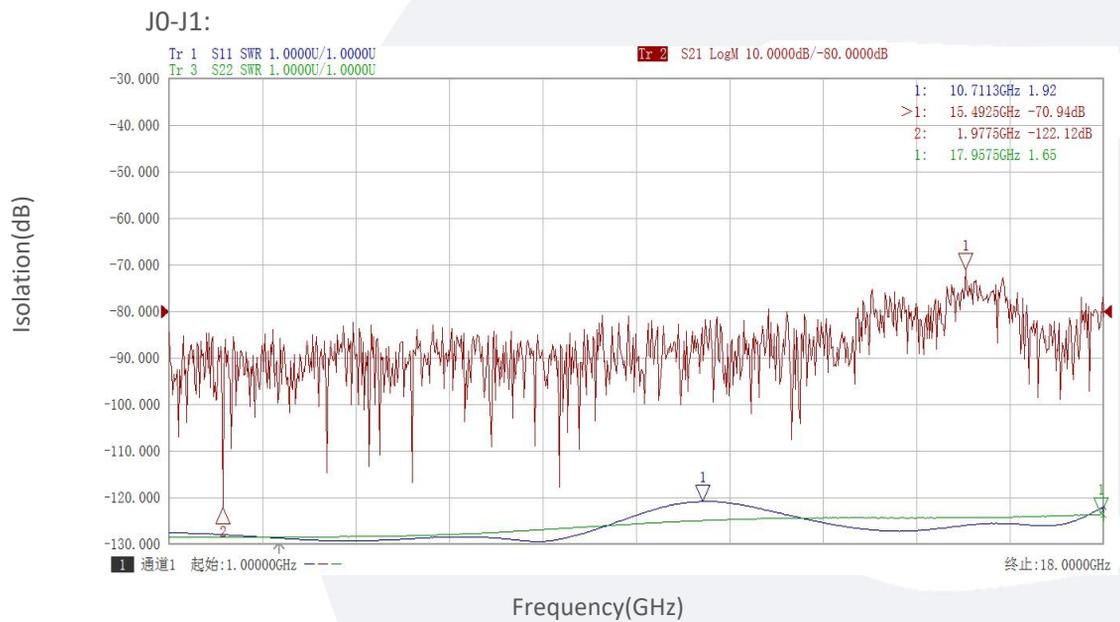
标准型号 Part Number	描述 Description	版本号 Revision
TLSPDT1G18GA	Absorption, Broadband GaAs MMIC Switch 1-18 GHz, SPDT, SMA	Rev.1.1

典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency



Isolation vs Frequency



典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency



Isolation vs Frequency

