

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:

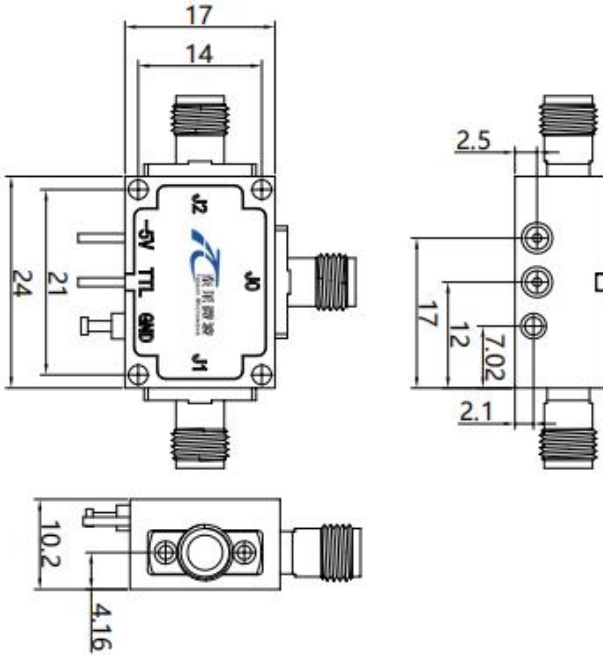
| 参数 Parameter | 指标 Value | 单位 Units |
|--------------------------------|------------|----------|
| 输入输出接口 Input /Output Connector | SMA Female | |
| 直流控制接口 Control Bias | Solder Pin | |
| 重量 Weight | ≤200 | g |

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:

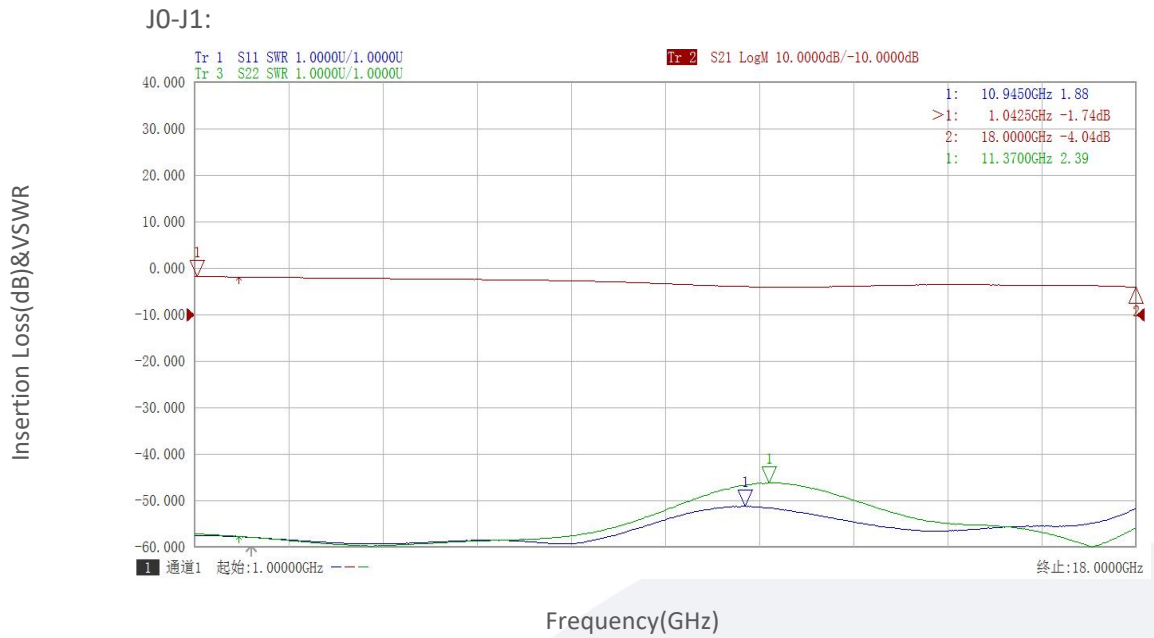
| 参数 Parameter | Min | Typ | Max | 单位 Units |
|------------------------------------|---|-----|------|----------|
| 操作温度 Operating Temperature | -25 | | +85 | °C |
| 存储温度 Non-operating Temperature | -55 | | +125 | °C |
| 相对湿度 Relative humidity | | 95 | | % |
| 海拔 Altitude | 50,000 | | | feet |
| 震动 Shock / 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:

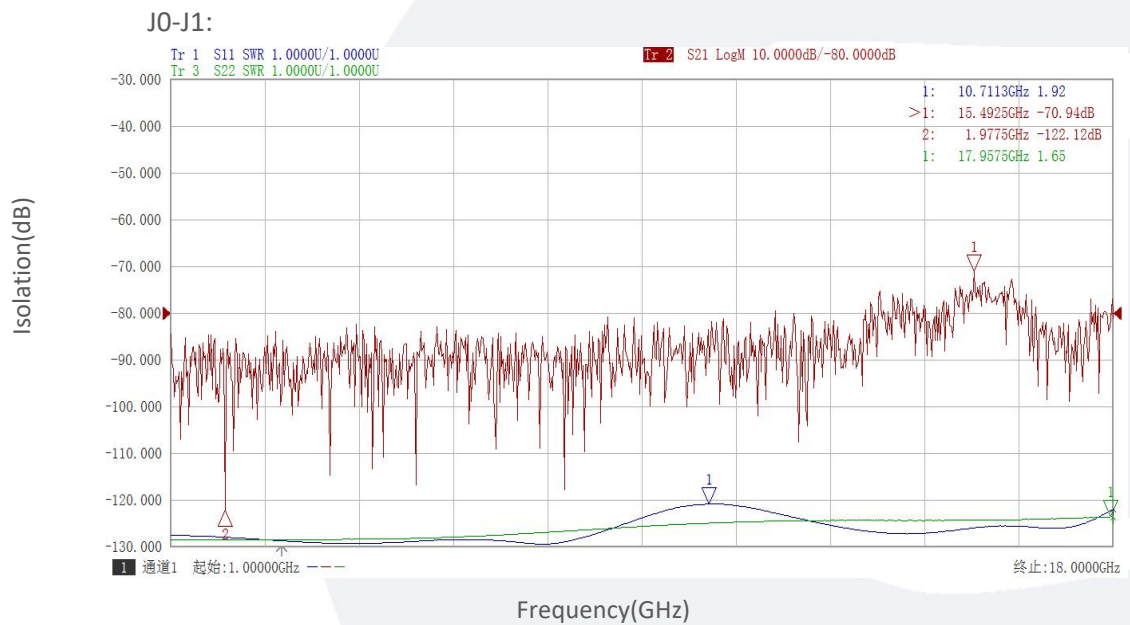
| 标准型号 Part Number | 描述 Description | 版本号 Revision |
|------------------|---|--------------|
| TLSPDT1G18GA | Absorption, Broadband GaAs MMIC Switch 1-18 GHz, SPDT, SMA | Rev.1.1 |

典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency

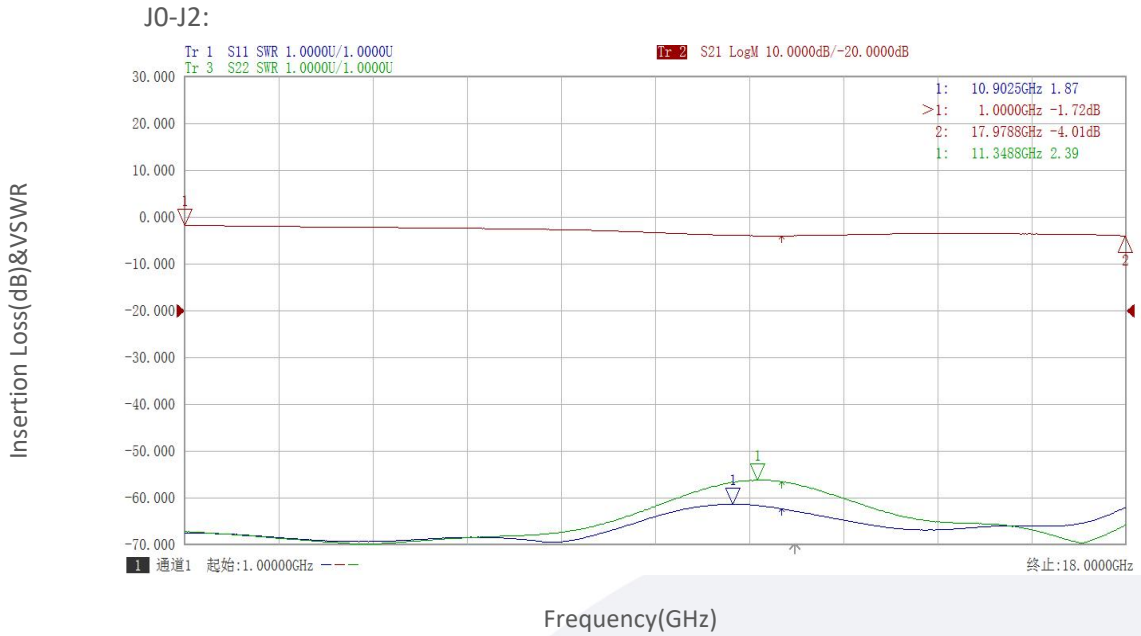


Isolation vs Frequency



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Insertion Loss&VSWR vs Frequency



Isolation vs Frequency

