

**Model: TLSPDT0.05G50GA-45**
**Absorption, Broadband MMIV Switch  
 0.5-50 GHz, SPDT, 2.4mm**
**Feature:**

- Ultra Wide Band: 0.05-50 GHz
- Low Insertion Loss: 6.5 dB
- Power Handling : 23 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	0.05-50			GHz
插损 Insertion Loss		6.5	9.5	dB
隔离 Isolation	45	60		dB
切换速度 Switch Speed		50	100	ns
输入驻波 Input VSWR		2.0	3.0	:1
输出驻波 Output VSWR		2.0	3.0	:1
耐功率 Power Handling			23	dBm
直流电压 DC Voltage		+5		V DC
直流电流 DC Supply Current		20		mA
阻抗 Impedance	50			Ohms

**机械特性 Mechanical Specifications:**

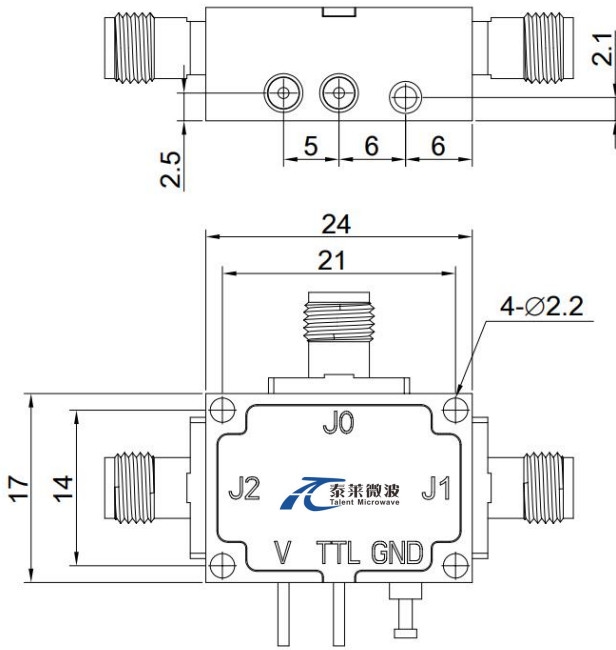
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.4mm Female	
直流控制接口 Control Bias	Solder Pin	
尺寸 Size	24*17*13	mm
重量 Weight	-	g

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	+/-5%
输入功率 RF Input Power	23 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



真值表 Truth Table

TTL Control Input	Signal Path State
C1	
0	J0-J2
1	J0-J1
1: +5V 0:0V	

温度环境 Environmental Conditions:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

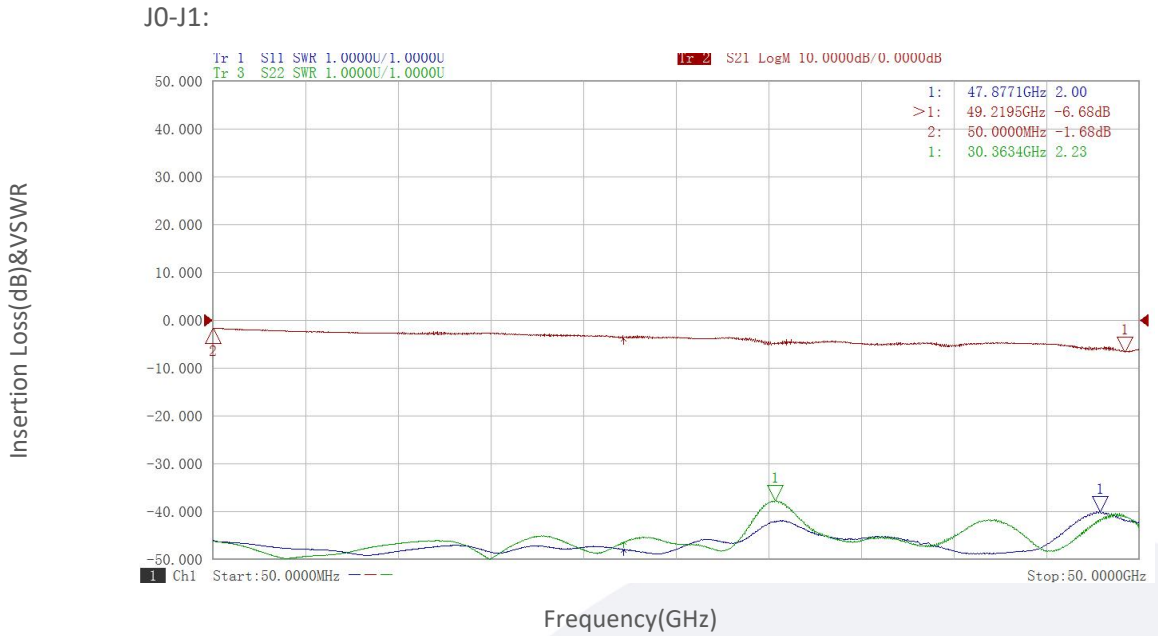
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-20		+70	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

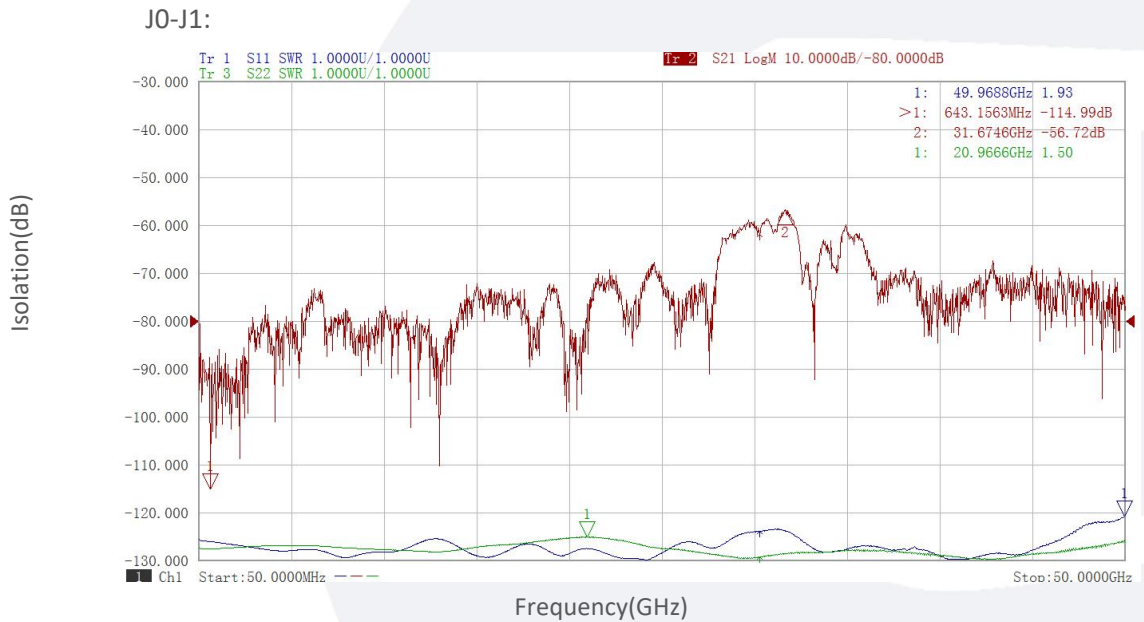
标准型号 Part Number	描述 Description	版本号 Revision
TLSPDT0.05G50GA-45	Absorption, Broadband MMIC Switch 0.05-50 GHz, SPDT, 2.4mm Female	Rev.1.1

典型曲线 Typical Performance Data:

Insertion Loss&VSWR vs Frequency



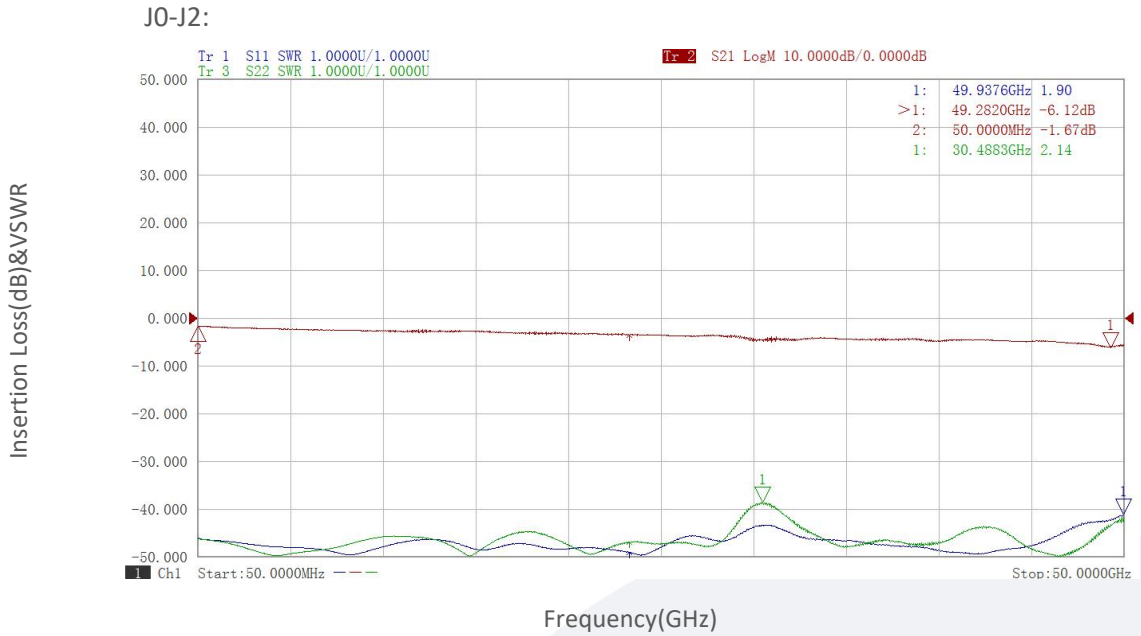
Isolation vs Frequency



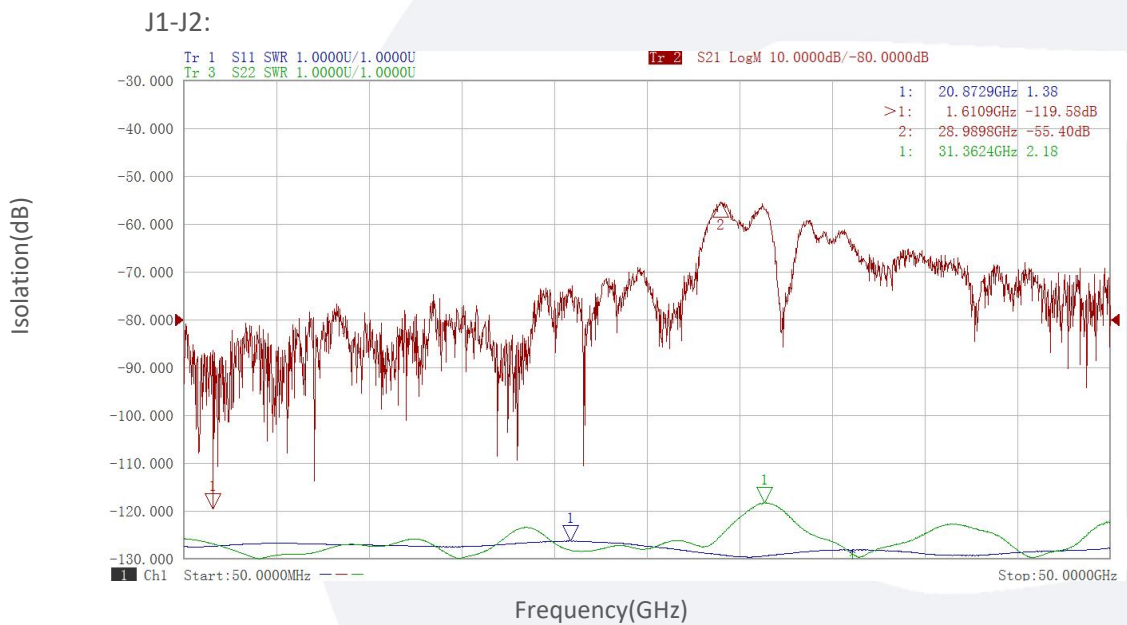
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

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Insertion Loss&VSWR vs Frequency



Isolation vs Frequency



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