Suzhou Talent Microwave,Inc
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Absorptive,Broadband PIN Switch

0.1-8GHz/SP6T/SMA Female

Model: TLSP6T0.1G8GA

The TLSP6T0.1G8GA is an absorptive MMIC diode based switch with a TTL driver that operates between 0.1 and 8 GHz. The SP6T switch offers 45 dB port-to-port isolation with a typical switching speed of 1 ns. The input and output connectors of the switch are SMA female.

Features:

- Frequency range: 0.1-8GHz
- Low Insertion Loss: 4dB
- Power Handling : 30dBm
- High Isolation
- Switch Type: Absorptive

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range		0.1-8		GHz
插损 Insertion Loss		4		dB
隔离 Isolation		45		dB
切换速度 Switch Speed		100	200	ns
输入驻波 Input VSWR		1.5		:1
输出驻波 Output VSWR		1.5		:1
耐功率 Power Handling			30	dBm
直流电压 DC Voltage		5		V DC
控制电平 Control Logic TTL		0/+5		V DC
直流电流 DC Supply Current		200		mA
开关类型 Switch type		Absorptive		
阻抗 Impedance		50		Ohms

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绝对最大值 Absolute Maximum Ratings :

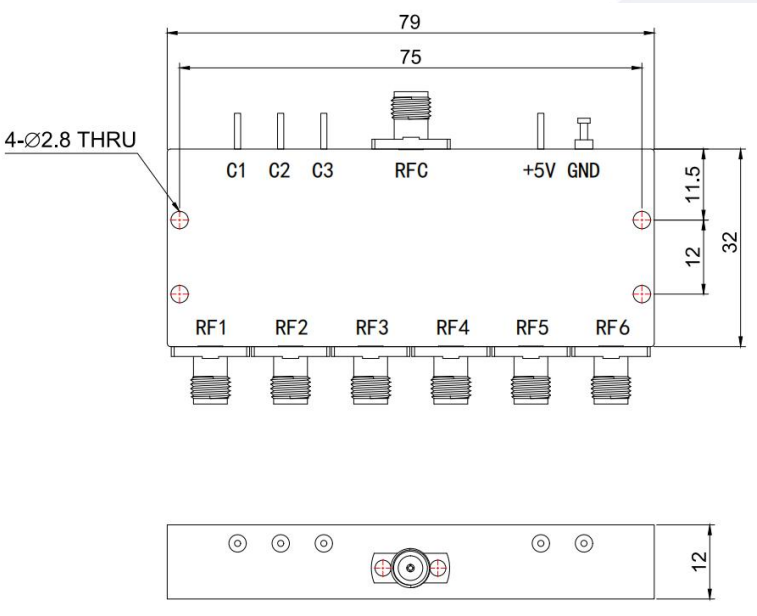
描述 Description	参数 Parameter	单位 Units
供电偏置电压 Supply Bias Voltage	±5%	V
射频输入功率 RF Input Power	30	dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

机械特性 Mechanical Specifications:

描述 Description	参数 Parameter	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
直流控制接口 Control Bias	Solder Pin	
尺寸 Size	79*32*12	mm

外形图 Outline Drawing:

Unit:mm



真值表 Truth Table			
TTL Control Input			Signal Path State
Bit1	Bit2	Bit3	
0	0	0	J0-J1
0	0	1	J0-J2
0	1	0	J0-J3
0	1	1	J0-J4
1	0	0	J0-J5
1	0	1	J0-J6

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V (±5%)
Low（0）	0 to 0.8Vdc
High（1）	2.0 to +5.0Vdc

1.Dimensions are in mm [inches]
2.Tolerances: Outline drawing ±0.2 [0.008] Hole ±0.2 [0.008]
NOTE: ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	℃
存储温度 Non-operating Temperature	-45		+85	℃
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			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 Base Number	描述 Desciption	版本号 Revision
TLSP6T0.1G8GA	Absorptive,Broadband MMIC Switch 0.1-8 GHz,SP6T,SMA	Rev.1.1