

## Absorptive, Broadband MMIC Switch

9KHz-8GHz/SP8T/ SMA/Phase Matched

Model: TLSP8T9K8GA-PM

The TLSP4T1G40GA is an absorptive MMIC switch with a TTL driver that operates between 9KHz and 8 GHz. The SP8T switch offers 50 dB port-to-port isolation with a typical switching speed of 50 nanoseconds. The input and output connectors of the switch are SMA female.

### Features:

- Ultra Wide Band: 9KHz-8GHz
- Low Insertion Loss: 4.0 dB
- Power Handling : 30 dBm
- 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	9KHz-8GHz			
插损 Insertion Loss		4	5	dB
隔离 Isolation		50		dB
切换速度 Switch Speed		50	100	ns
输入驻波 Input VSWR		1.5	2	:1
输出驻波 Output VSWR		1.5	2	:1
耐功率 Power Handling			30	dBm
直流电压 DC Voltage		5		V DC
直流电流 DC Supply Current		30		mA
开关类型 Switch type	Absorptive			
阻抗 Impedance		50		Ohm

## 绝对最大值 Absolute Maximum Ratings :

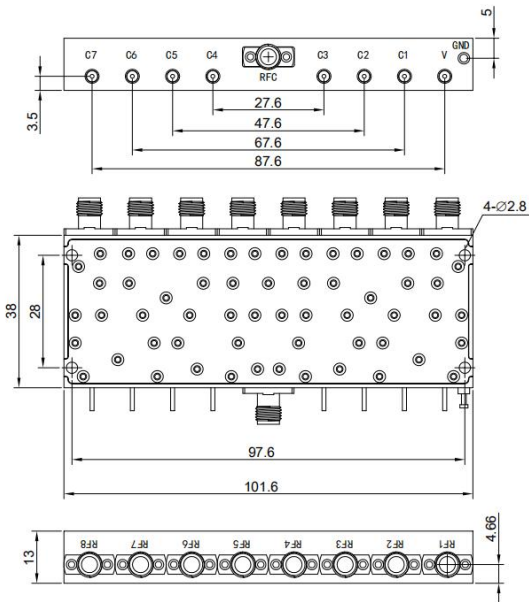
描述 Description	参数 Parameter	单位 Units
供电偏置电压 Supply Bias Voltage	±5%	V
射频输入功率 RF Input Power	30	dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

## 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	101.6*38*13	mm

## 外形图 Outline Drawing:

Unit:mm



真值表 Truth Table

TTL Control Input							Signal Path State
C1	C2	C3	C4	C5	C6	C7	
0	0	0	0	0	0	0	J0-J1
0	0	0	1	0	0	0	J0-J2
0	1	0	0	0	0	0	J0-J3
0	1	0	0	1	0	0	J0-J4
1	0	0	0	0	0	0	J0-J5
1	0	0	0	0	1	0	J0-J6
1	0	1	0	0	0	0	J0-J7
1	0	1	0	0	0	1	J0-J8

TTL Control Voltages &VDD

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



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

## 温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
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 Description	版本号 Revision
TLSP8T9K8GA-PM	Absorptive,Broadband MMIC Switch 9 KHz-8 GHz,SP8T,SMA	Rev.1.1