

Absorptive, Broadband PIN Switch

8-18GHz/SP32T/ SMA Female

Model: TLSP32T8G18GA-PM01

The TLSP32T8G18GA-PM01 is an absorptive PIN diode based switch with a TTL driver that operates between 8 and 18 GHz. The SP32T switch offers 50 dB port-to-port isolation with a typical switching speed of 100 ns. The input and output connectors of the switch are SMA female.

Features:

- Ultra Wide Band: 8-18 GHz
- Low Insertion Loss: 10.0 dB
- Power Handling : 27 dBm
- High Isolation
- Switch Type: Absorptive

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

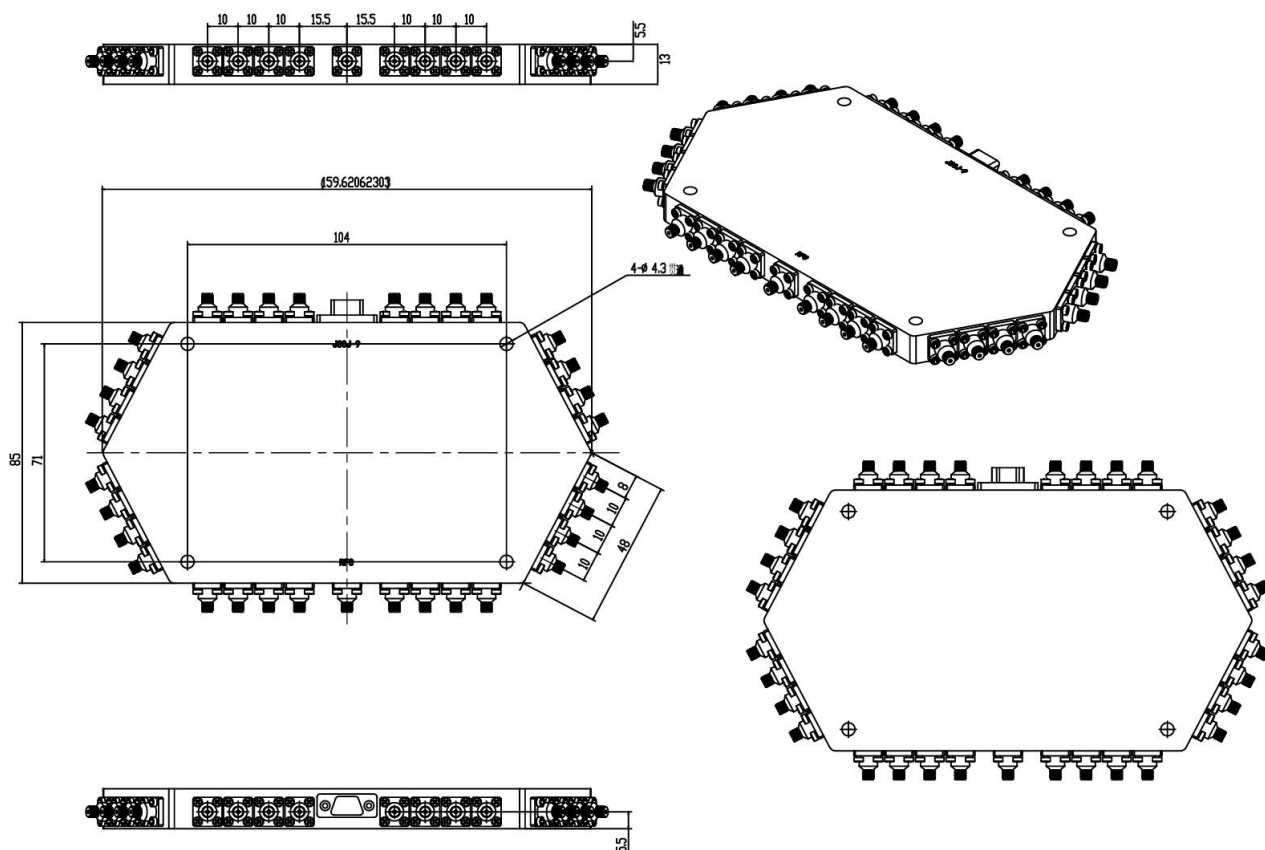
电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	8-18			GHz
插损 Insertion Loss		10	14	dB
隔离 Isolation		50		dB
切换速度 Switch Speed		80	100	ns
输入驻波 Input VSWR		2		:1
输出驻波 Output VSWR		2		:1
耐功率 Power Handling		27		dBm
隔离端耐功率 Isolation port Power Handling		20		dBm
支路相位一致性 Side port phase consistency		±8	±10	°
直流电压 DC Supply Voltage		5.5	8	V DC
控制电平 Control Logic TTL		0/+3.3		V DC
直流电流 DC Supply Current		2200		mA
开关类型 Switch type	Absorptive			
阻抗 Impedance	50			Ohms

DC blocking.

描述 Description	参数 Parameter	单位 Units
射频输入功率 RF Input Power	27	dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

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	J30J-9ZKP	
尺寸 Size	59.62*85*13	mm



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

直流供电接口 DC Supply Connector (J30J-9ZKSP):

引脚 Pin	功能 Function	引脚 Pin	功能 Function	引脚 Pin	功能 Function
1	GND	4	C1	7	C4
2	+5.5V	5	C2	8	C5
3	+5.5V	6	C3	9	GND

真值表 Truth Table:

真值表 Truth Table					
TTL Control Input					Signal Path State
C1	C2	C3	C4	C5	
0	0	0	0	0	RF1
0	0	0	0	1	RF2
0	0	0	1	0	RF3
0	0	0	1	1	RF4
0	0	1	0	0	RF5
0	0	1	0	1	RF6
0	0	1	1	0	RF7
0	0	1	1	1	RF8
0	1	0	0	0	RF9
0	1	0	0	1	RF10
0	1	0	1	0	RF11
0	1	0	1	1	RF12
0	1	1	0	0	RF13
0	1	1	0	1	RF14
0	1	1	1	0	RF15
0	1	1	1	1	RF16

真值表 Truth Table					
TTL Control Input					Signal Path State
C1	C2	C3	C4	C5	
1	0	0	0	0	RF17
1	0	0	0	1	RF18
1	0	0	1	0	RF19
1	0	0	1	1	RF20
1	0	1	0	0	RF21
1	0	1	0	1	RF22
1	0	1	1	0	RF23
1	0	1	1	1	RF24
1	1	0	0	0	RF25
1	1	0	0	1	RF26
1	1	0	1	0	RF27
1	1	0	1	1	RF28
1	1	1	0	0	RF29
1	1	1	0	1	RF30
1	1	1	1	0	RF31
1	1	1	1	1	RF32

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5.5V
Low (0)	0 Vdc
High (1)	+3.3 to +5.0Vdc

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
TLSP32T8G18GA-PM01	Absorptive,Broadband PIN Switch 8-18 GHz,SP32T,SMA	Rev.1.1