

Absorptive, Broadband MMIC Switch 1-20GHz/SPDT/SMA Female

Model: TLSPDT1G20GA-1W

The TLSPDT1G20GA-1W is an absorptive MMIC switch with a TTL driver that operates between 1G and 20 GHz. The SPDT switch offers 60 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:

- Frequency range: 1-20GHz
- Low Insertion Loss: 4 dB
- Power Handling : 30dBm
- High Isolation
- Switch Type: Absorptive
- Phase Matched

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1-20			GHz
Insertion Loss		4		dB
Isolation	60			dB
Switch Speed		50	100	ns
Input VSWR		1.5	2	:1
Output VSWR		1.5	2	:1
Power Handling			30	dBm
Input P1dB		25		dBm
DC Voltage		5		V DC
DC Supply Current		10		mA
Switch type	Absorptive			
Impedance	50			Ohms

Absolute Maximum Ratings :

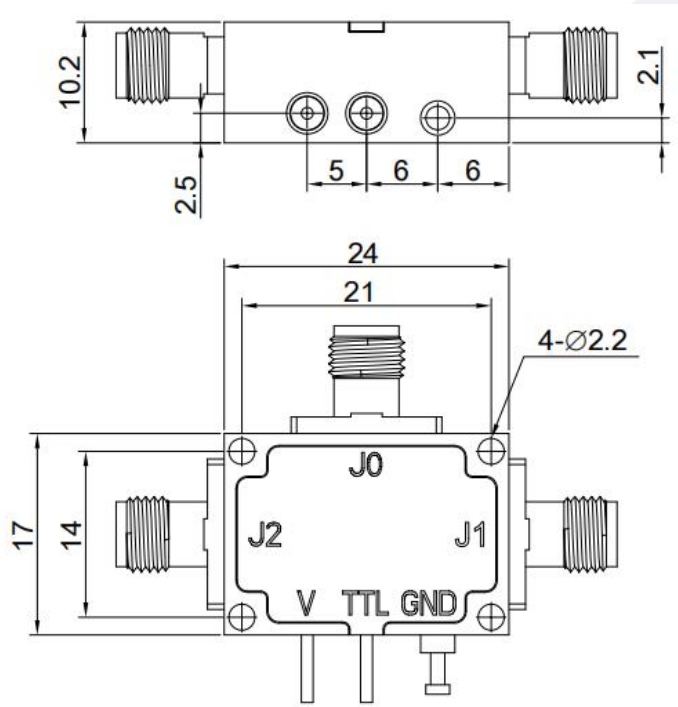
Description	Parameter	Units
Supply Bias Voltage	$\pm 5\%$	V
RF Input Power	30	dBm
ESD sensitivity (HBm)	Class 0, passed 150V	

Mechanical Specifications:

Description	Parameter	Units
Input /Output Connector	SMA Female/SMA Female	
Control Bias	Solder Pin	
Size	24*17*10.2	mm

Outline Drawing:

Unit:mm



Regulatory Compliance:



Truth Table	
TTL Control Input	Signal Path State
0	J0-J1
1	J0-J2

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V ($\pm 5\%$)
Low (0)	0 to 0.8Vdc
High (1)	+3.3 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

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-10		+65	°C
Non-operating Temperature	-45		+85	°C
Relative humidity		95		%
Altitude	10,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

Base Number	Description	Revision
TLSPDT1G20GA-1W	Absorptive,Broadband MMIC Switch 1-20 GHz,SPDT,SMA	Rev.1.0