

Reflective, Broadband MMIC Switch

0.1G-60G/SPDT/1.85mm Female

Model: TLSPDT0.1G60GR

The TLSPDT0.1G60GR is an reflective MMIC switch with a TTL driver that operates between 0.1G and 60 GHz. The SPDT switch offers 25 dB port-to-port isolation with a typical switching speed of 50 nanoseconds. The input and output connectors of the switch are 1.85mm female.

Features:

- Frequency range: 0.1-60GHz
- Low Insertion Loss: 3 dB
- Power Handling : 25 dBm
- High Isolation
- Switch Type: Reflective

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	0.1-60			GHz
Insertion Loss		3		dB
Isolation		25		dB
Switch Speed		50	100	ns
Input VSWR		2		:1
Output VSWR		2		:1
Power Handling			25	dBm
DC Voltage		5		V DC
DC Supply Current		100		mA
TTL Voltage		0/+3.3		V
Control Current		3		mA
Switch type	Reflective			
Impedance	50			Ohms

Absolute Maximum Ratings :

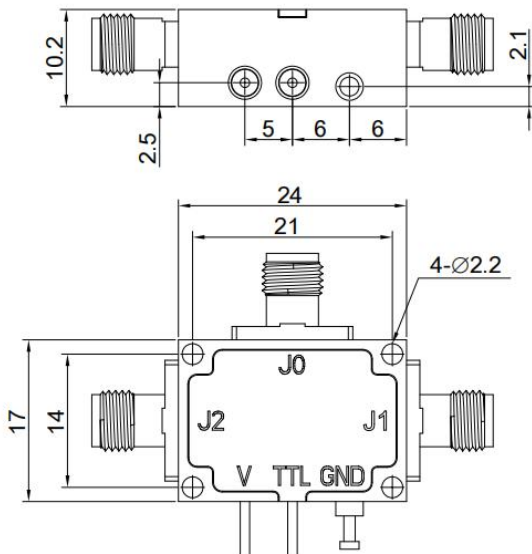
Description	Parameter	Units
Supply Bias Voltage	±5%	V
RF Input Power	25	dBm
ESD sensitivity (HBm)	Class 0, passed 150V	

Mechanical Specifications:

Description	Parameter	Units
Input /Output Connector	1.85mm Female/1.85mm Female	
Control Bias	Solder Pin	
Size	24*17*10.2	mm

Outline Drawing:

Unit:mm



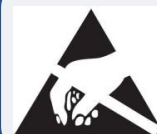
Regulatory Compliance:



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

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V (± 5%)
Low (0)	0 to 0.8Vdc
High (1)	+2 to +3.3Vdc

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



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

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
TLSPDT0.1G60GR	Reflective,Broadband MMIC Switch 0.1-60 GHz,SPDT,1.85mm Female	Rev.1.1