

Reflective, Broadband PIN Switch

1-6GHz/SPDT/N Female

Model: TLSPDT1G6G-200W

The TLSPDT1G6G-200W is a reflective type switch with a TTL driver that operates between 1 and 6 GHz. The SPDT switch offers 30 dB port-to-port isolation with a typical switching speed of 200 ns. The input and output connectors of the switch are N female.

Features:

- Frequency range: 1-6GHz
- Low Insertion Loss: 2dB
- Power Handling : 200W
- High Isolation
- Switch Type: Reflective

Applications:

- Communication Systems
- Automatic Test Equipment
- Switching Network

Electrical Characteristics:

Parameter	Min	Typ	Max	Units
Frequency range	1-6			GHz
Insertion Loss			2	dB
Isolation	30			dB
Switch Speed			200	ns
Input VSWR			2.2	:1
Output VSWR			2.2	:1
Power Handling			200	W
DC Voltage		+5/-40		V DC
Control Voltage		0~+0.3/+2.8~+5		V
DC Supply Current		+50/-150		mA
Switch type	Reflective			
Impedance	50			Ohms

Absolute Maximum Ratings :

Description	Parameter	Units
Supply Bias Voltage	±2	%
RF Input Power	200	W
ESD sensitivity (HBm)	Class 0, passed 150V	

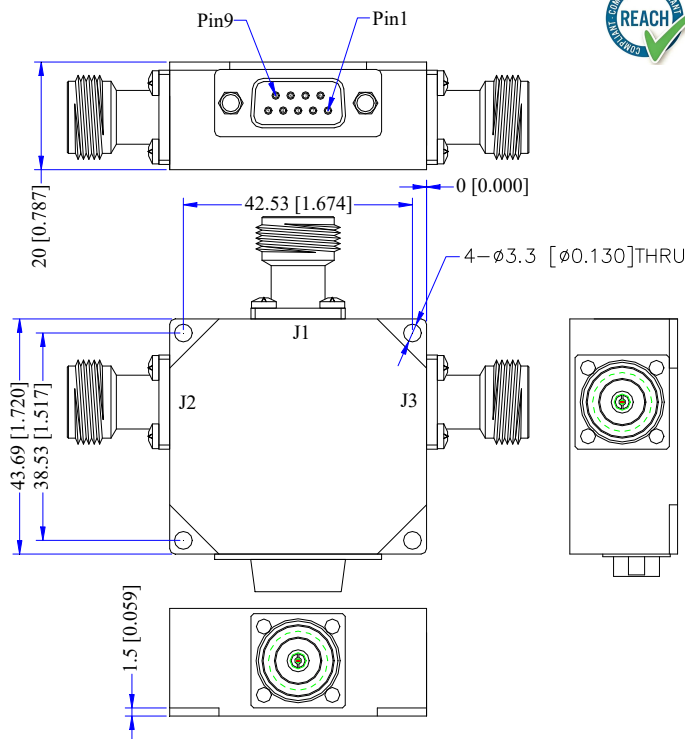
Mechanical Specifications:

Description	arameter	Units
Input /Output Connector	N Female/N Female	
Control Bias	DB9	
Size	42.53*43.69*20	mm

Outline Drawing:

Unit:mm

Regulatory Compliance:



Truth Table	
TTL Control Input	Signal Path State
E1	
0	J1-J2
1	J1-J3

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V (± 2%)
VEE	-40V (± 2%)
Low (0)	0 to 0.3Vdc
High (1)	2.8 to +5.0Vdc



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

DC Supply Connector (D-SUB9 Male):

Pin	Name
1	+5V
2	-40V
3	GND
4	E1
5	D_GND
6~9	NC

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-25		+55	°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
TLSPDT1G6G-200W	Reflective,Broadband PIN Switch 1-6 GHz,SPDT,N Female	Rev.1.1