

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

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	1-6			GHz
插损 Insertion Loss			2	dB
隔离 Isolation	30			dB
切换速度 Switch Speed			200	ns
输入驻波 Input VSWR			2.2	:1
输出驻波 Output VSWR			2.2	:1
耐功率 Power Handling			200	W
直流电压 DC Voltage		+5/-40		V DC
控制电压 Control Voltage		0~+0.3/+2.8~+5		V
直流电流 DC Supply Current		+50/-150		mA
开关类型 Switch type	Reflective			
阻抗 Impedance	50			Ohms

绝对最大值 Absolute Maximum Ratings :

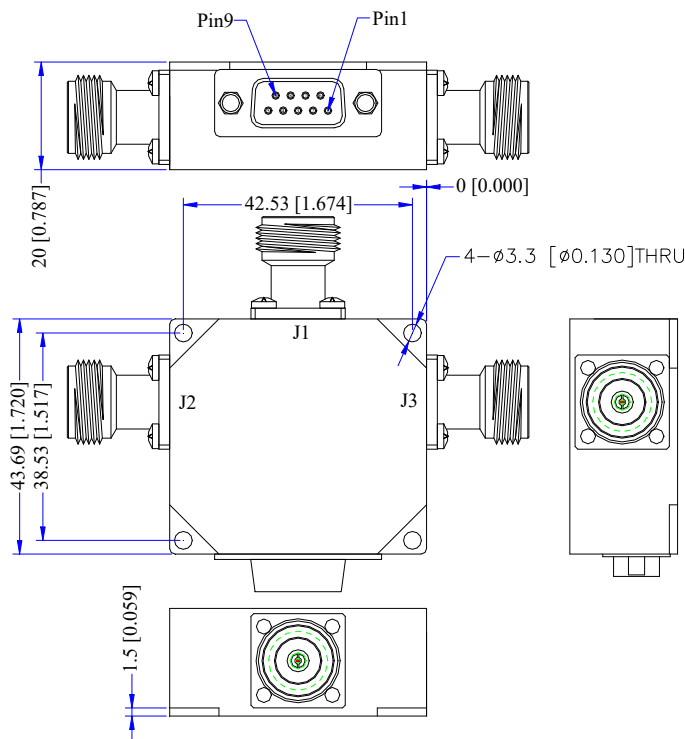
描述 Description	参数 Parameter	单位 Units
供电偏置电压 Supply Bias Voltage	±2	%
射频输入功率 RF Input Power	200	W
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

机械特性 Mechanical Specifications:

描述 Description	参数 Parameter	单位 Units
输入/输出接口 Input /Output Connector	N Female/N Female	
直流控制接口 Control Bias	DB9	
尺寸 Size	42.53*43.69*20	mm

外形图 Outline Drawing:

Unit:mm



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

TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V ($\pm$ 2%)
VEE	-40V ($\pm$ 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.

直流供电接口 DC Supply Connector (D-SUB9 Male):

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

温度环境 Environmental Conditions:

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