P/N:LBW-SW06-PR001G6G-SP4T

Отражающий коаксиальный переключатель SP4T
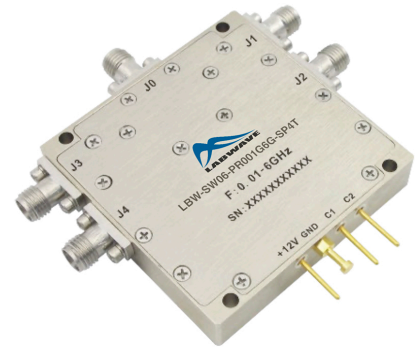0,01 - 6 ГГц

Характеристики:

- Широкий рабочий диапазон 10 МГц - 6 ГГц
- Управление через драйвер TTL
- Высокая скорость переключения
- Низкие вносимые потери и высокая изоляция
- Холодное переключение высокой мощности
- Параметры могут быть изменены по запросу

Области применения:

- Беспроводные сети
- 5G сети
- Оборудование для тестирования и измерений
- Микроэлектроника и спутниковая связь
- Оптоволоконные сети

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range		0.01-3			3-6		GHz
Insertion Loss		1.8	2.0		2.2	2.6	dB
Insertion Loss Temperature Coefficient		0.003			0.003		dB/ ° C
Isolation	35	45		33	35		dB
Input VSWR		1.5	1.8		1.5	1.8	: 1
Output VSWR		1.5	1.8		1.5	1.8	: 1
*RF Input Power (CW) (50Ω,T = 25ºC)			46			46	dBm
DC Power Dissipation		2			2		W
0.1dB Compression P0.1dB (P0.1dB)		46			46		dBm
IIP3		55			50		dBm
Switching Speed			400 Max.				ns
Bias Current (+12V)			150 Max.				mA
Weight			5.5 Max.				ounces
Impedance			50				Ω
Input / Output Connectors			SMA-Female				
Finish			Nickel plated				
Material			Copper				
Sealing			Hermetically Sealed (Optional)				

* When the working frequency is lower than 100MHz, please refer to the max input power curve..

Отражающий коаксиальный переключатель SP4T 0,01 - 6 ГГц

Absolute Maximum Ratings

Biasing	+12V±10%

Notes:
1. TTL pins cannot be connected to the negative voltage otherwise the internal driver will be damaged .
2. If the device operates in high power state, recommend keeping case temperature lower than 60℃.
3. Cold Switching: Before changing any TTL signal(s), the RF input power must be blanked or the switch could be damaged.
4. DC blocks required . Input and output ports must not be connected to DC ground or any DC voltage or the switch will be damaged.

Ordering Information
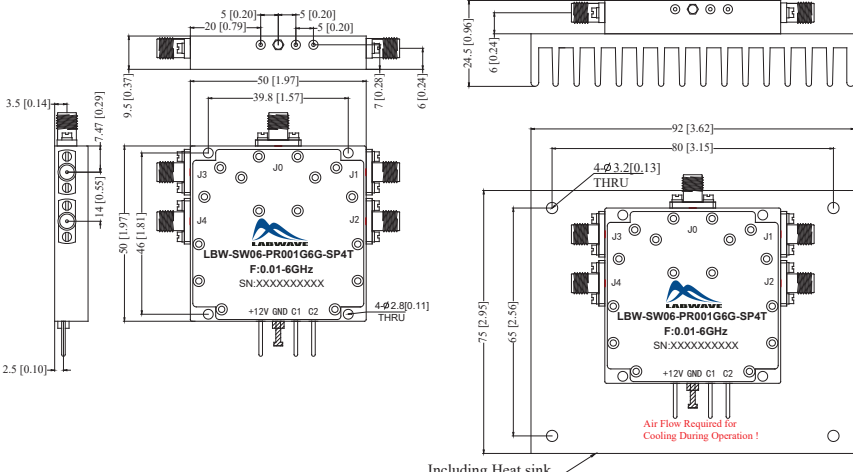
Part No.	Description
LBW-SW06-PR001G6G-SP4T	SP4T0.01-6GHz PIN Diode Switch

Environmental Specifications

Operational Temperature	-40ºC~+85ºC
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

Outline Drawing:

All Dimensions in mm (inches)
Housing Tolerances ±0.1 (0.004)

Notes:

. Heatsink Included - Mandatory for Operation .

Truth Table

TTL Control Voltage THRESHOLD	Low(0)=0~0.8V
	High(1)=2.8~5V

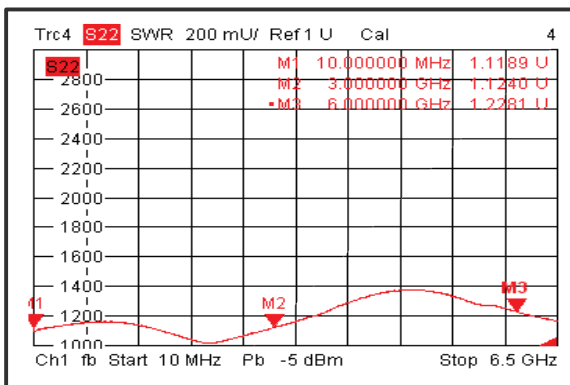| Control Input TTL		Signal Path State
c1	c2	
0	0	J0-J1
0	1	J0-J2
1	0	J0-J3
1	1	J0-J4
Control Pin Customization available upon request		

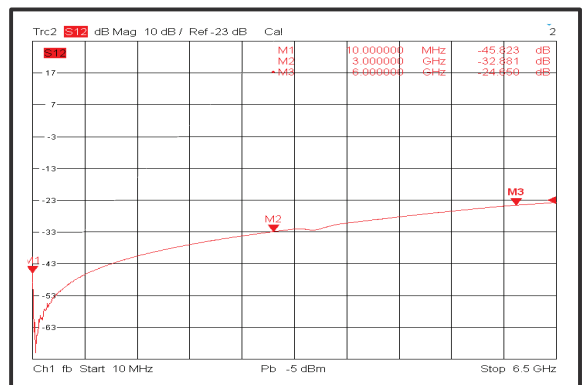Отражающий коаксиальный переключатель SP4T 0,01 - 6 ГГц
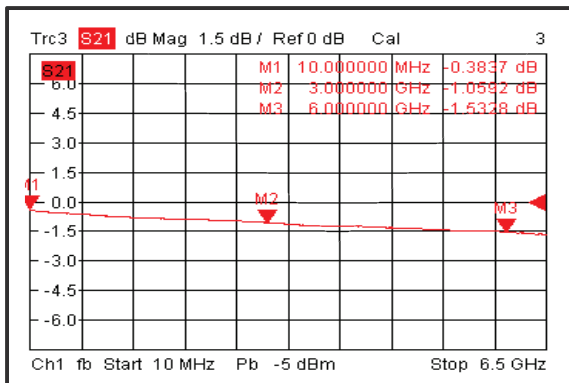
Insertion Loss @+25℃

Trc3 S21 dB Mag 1.5 dB / Ref 0 dB   Cal   3

M1	10.000000 MHz	-0.5369 dB
M2	3.000000 GHz	-1.2157 dB
M3	6.000000 GHz	-1.8174 dB

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Input VSWR @+25℃

Trc1 S11 SWR 200 mU/ Ref 1 U   Cal   1

M1	10.000000 MHz	1.1094 U
M2	3.000000 GHz	1.1415 U
M3	6.000000 GHz	1.2822 U

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Output VSWR @+25℃

Trc4 S22 SWR 200 mU/ Ref 1 U   Cal   4

M1	10.000000 MHz	1.1189 U
M2	3.000000 GHz	1.1240 U
M3	6.000000 GHz	1.2281 U

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Isolation @+25℃

Trc2 S12 dB Mag 10 dB / Ref -23 dB   Cal   2

M1	10.000000	MHz	-45.823 dB
M2	3.000000	GHz	-32.881 dB
M3	6.000000	GHz	-24.650 dB

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Insertion Loss @-40℃

Trc3 S21 dB Mag 1.5 dB / Ref 0 dB   Cal   3

M1	10.000000 MHz	-0.3837 dB
M2	3.000000 GHz	-1.0592 dB
M3	6.000000 GHz	-1.5338 dB

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Input VSWR @-40℃

Trc1 S11 SWR 200 mU/ Ref 1 U   Cal   1

M1	10.000000 MHz	1.0696 U
M2	3.000000 GHz	1.1363 U
M3	6.000000 GHz	1.1765 U

Ch1 fb Start 10 MHz   Pb   -5 dBm   Stop 6.5 GHz

Отражающий коаксиальный переключатель SP4T 0,01 - 6 ГГц

Output VSWR @-40℃
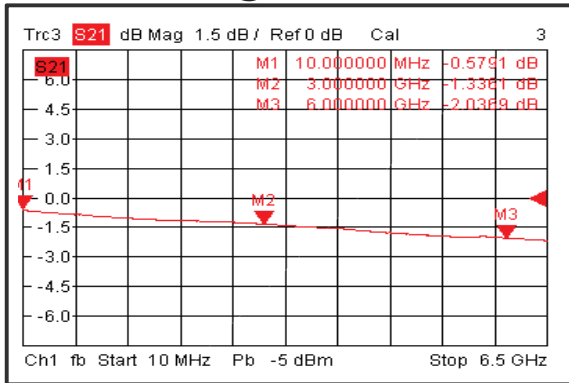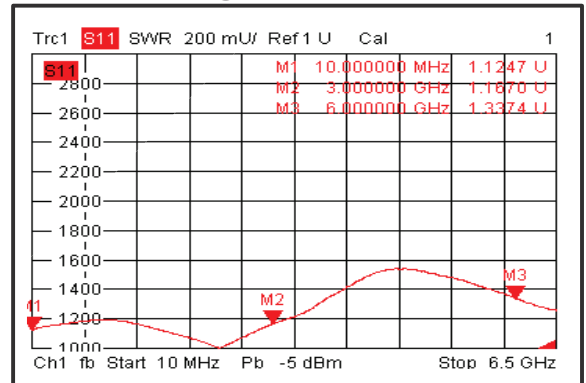
Isolation @-40℃

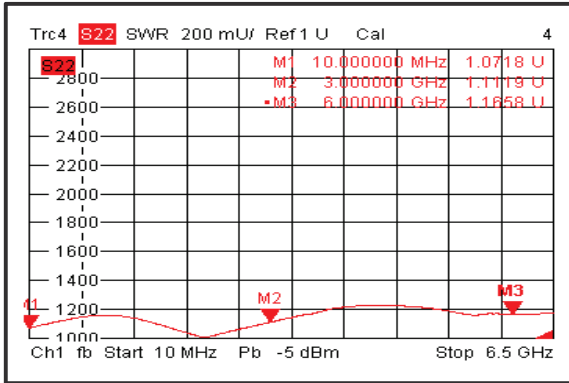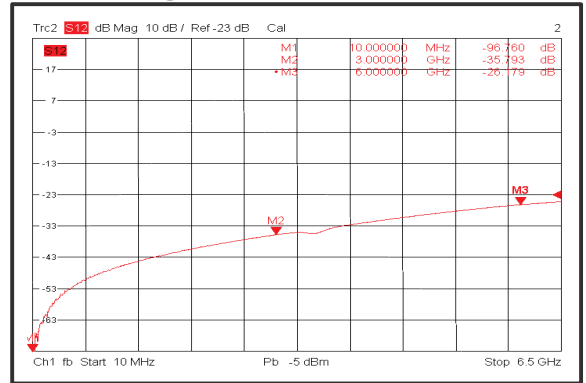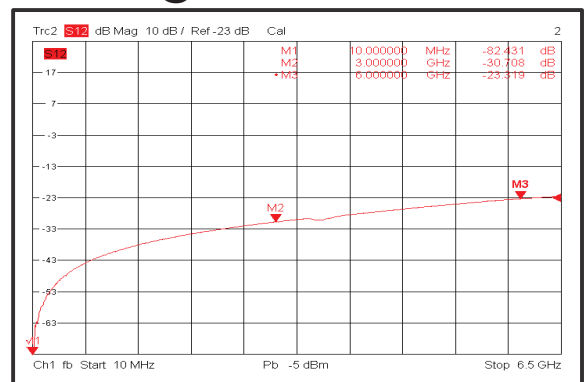## Insertion Loss @+85℃

Input VSWR @+85℃
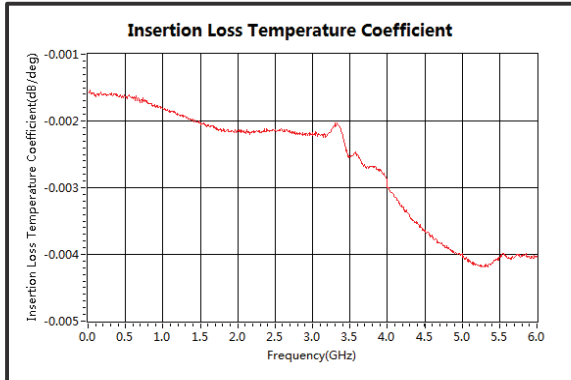

Output VSWR @+85℃
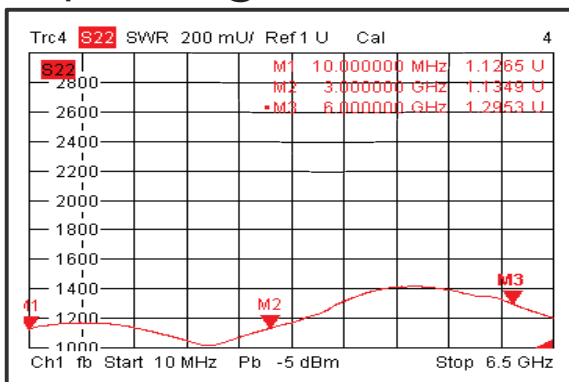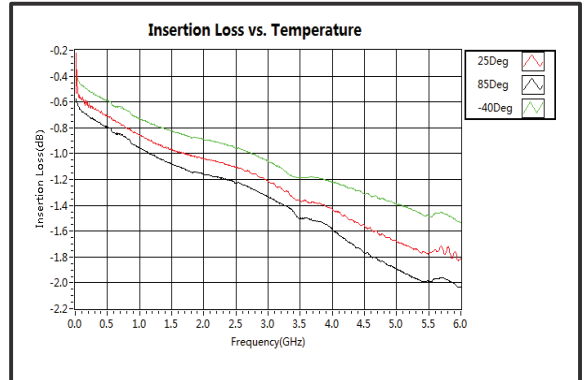

Isolation @+85℃

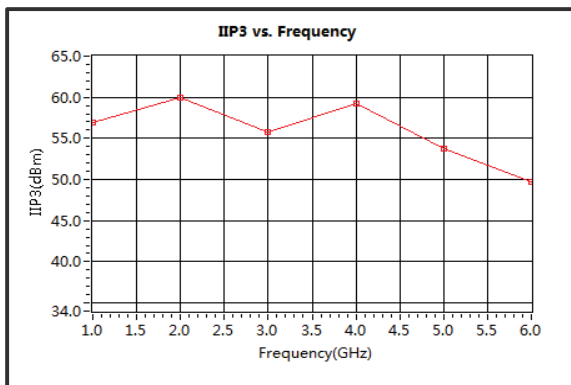Отражающий коаксиальный переключатель SP4T 0,01 - 6 ГГц

Insertion Loss Temperature Coefficient

Insertion Loss vs. Temperature

IIP3

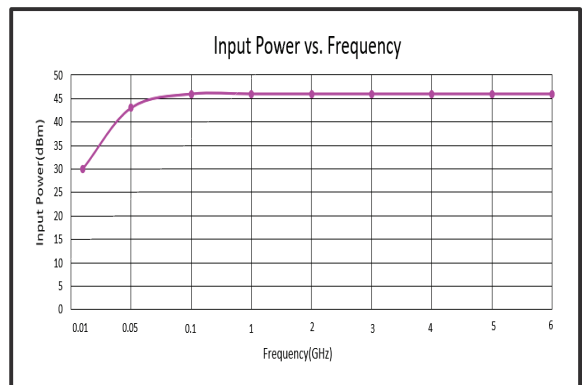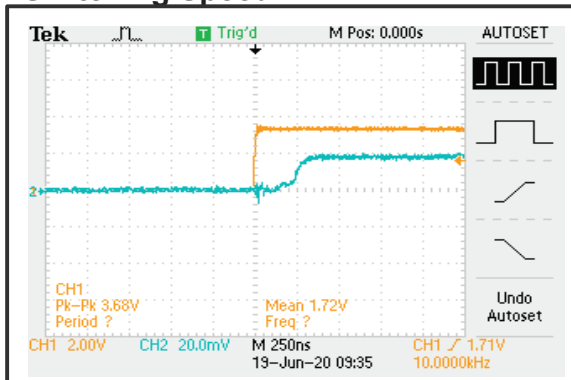## Input Power vs. Frequency

Switching Speed

Switching Speed