

REV	DESCRIPTION OF REVISION	By	DATE	APPROVED
A	INITIAL RELEASE	C. Cai	2023/5/17	C. Chen

## TECHNICAL DATA

### ► Electrical Data(25°C, Sea Level)

Pin Diode Switch Type	Absorptive SP8T Switch
Frequency Range	0.5~40GHz
Isolation	45dB min, 55dB typ
Insertion Loss	6.5dB typ, 8.5dB max
VSWR	2.2:1 typ, 2.8:1 max
Impedance	50 Ohms
Operating RF Power	+23dBm(CW, max)
DC Bias	+5V/≤120mA -5V/≤50mA
Switching Speed	Defined as 50% TTL to 90% RF(t-on) and 50% TTL to 10% RF(t-off)

### ► Mechanical Data

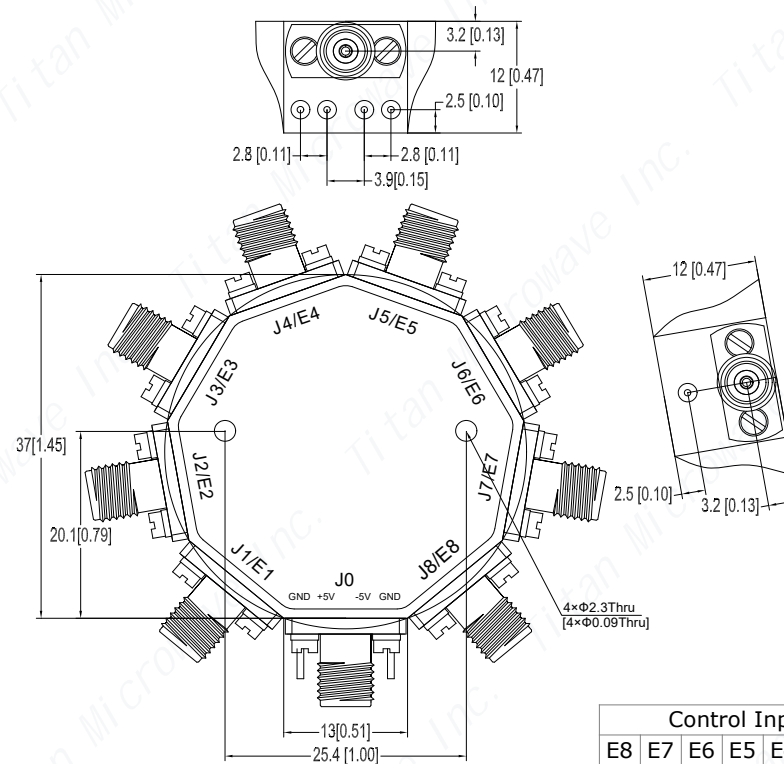
Dimensions	Φ37×12mm
Input/Output Connectors	2.92mm-Female
Material	Aluminum
Surface Finish	Gold Plated or Nickel Plated

### ► Environmental Data

Operating Temperature	-45°C~+85°C
Storage Temperature	-55°C~+125°C
Vibration	25g rms(15 degree 2KHz)
Humidity	100% RH@35°C 95% RH@40°C
Shock	20G for 11msc

### ► Absolute Maximum Ratings

Biasing	+5V, -5V
TTL Control Voltage	+5V/0V
Input RF Power	+23dBm
Storage Temperature	-55°C~+125°C



Control Input TTL								Signal Path
E8	E7	E6	E5	E4	E3	E2	E1	State
1	1	1	1	1	1	1	0	J0→J1
1	1	1	1	1	1	0	1	J0→J2
1	1	1	1	1	0	1	1	J0→J3
1	1	1	1	0	1	1	1	J0→J4
1	1	1	0	1	1	1	1	J0→J5
1	0	1	1	1	1	1	1	J0→J6
1	0	1	1	1	1	1	1	J0→J7
0	1	1	1	1	1	1	1	J0→J8

#### Notes:

- ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
- CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY

DRAWN: L. Ma 17/05/23		
ENGINEER: J. Zhu 17/05/23		
APPROVED: C. Chen 17/05/23		
TOLERANCE UNLESS OTHERWISE SPECIFIED		
x	±0.50	[0.019"]
.x	±0.20	[0.008"]
.xx	±0.10	[0.004"]
ANGLES	±1°	

**TITLE:**  
Pin Diode Switch, SP8T,  
0.5~40GHz, Absorptive,  
+5V, 2.92mm-Female

**PART No.:**  
TMPS8-00504000-S

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DIMENSIONS IN MILLIMETERS(mm)

<b>SIZE:</b> A4	<b>SCALE:</b>	<b>SHEET:</b> 1/1	<b>REV:</b> A
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