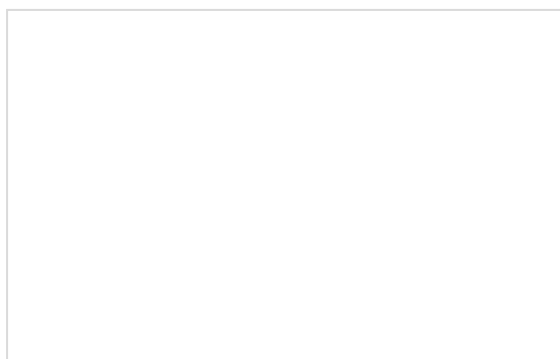




# MODEL HISP12TA1218 12-18GHz PIN Power Switch



Note: The photo is for illustration purposes only.  
Please refer to outline drawing

## ■ Features

- Ultra Wide Band
- Low Insertion Loss
- Power Handling
- Switch Type: Absorption

## ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

## □ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	12-18			GHz
Insertion Loss		3.2	3.9	dB
Isolation	40			dB
Input VSWR		1.5	2.0	-
Output VSWR		1.5	2.0	-
Switch Speed		50	100	ns
Input Third Order Intercept (Two-Tone Input Power = +8dBm Each Tone)	37			dBm
Power Handling (operational)			0.25	W
DC Current (Vcc=+/-5V)	400/30			mA
Control +/-5v	"-5V"=ON -20mA "+5V"=OFF 20mA			v
Impedance	50			Ω
Input Output Connector	SMA-k/SMA-K			
Material	Aluminium/Gold Painting			
Weight	50g			
Package Sealing	Epoxy Sealing (Standard)			

### Environmental Conditions

Operational Temperature	-45°C~+85°C	Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Storage Temperature	-55°C~+125°C	Shock	20G for 11msc half sin wave, 3 axis both directions
Executive Standard	MIL-STD-810G	Humidity	100% RH at 35c, 95%RH at 40°C

### Absolute Maximum Ratings

Supply Bias Voltage	+/-10%
RF INPUT POWER	0.25W
ESD sensitivity (HBm)	Class 0, passed 150V

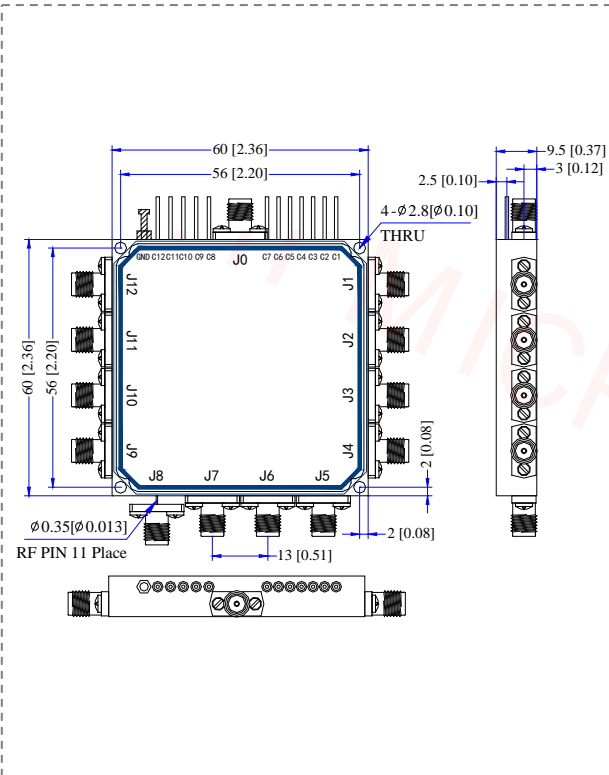


OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES



### Outline Drawing

All Dimensions in mm ( inches ) Tolerance  $\pm 0.25$  ( 0.01 )



Control Voltages	
Stage	Bias Condition
VDD	+5V ( $\pm 10\%$ )
VEE	-5V ( $\pm 10\%$ )

Truth Table											path	
c12	c11	c10	c9	c8	c7	c6	c5	c4	c3	c2		c1
+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	-5v	J0-J1
+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	-5v	+5v	J0-J2
+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	-5v	+5v	+5v	J0-J3
+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	-5v	+5v	+5v	+5v	J0-J4
+5v	+5v	+5v	+5v	+5v	+5v	+5v	-5v	+5v	+5v	+5v	+5v	J0-J5
+5v	+5v	+5v	+5v	+5v	+5v	-5v	+5v	+5v	+5v	+5v	+5v	J0-J6
+5v	+5v	+5v	+5v	+5v	-5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J7
+5v	+5v	+5v	+5v	-5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J8
+5v	+5v	+5v	-5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J9
+5v	+5v	-5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J10
+5v	-5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J11
-5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	+5v	J0-J12