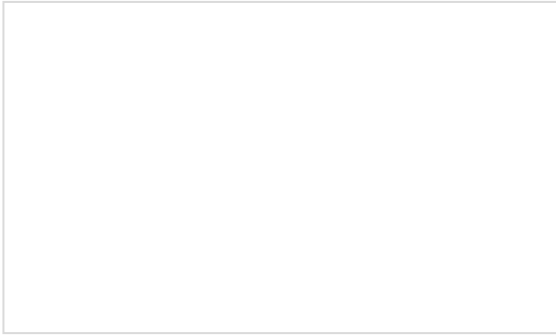




MODEL HISP12TA0204

2-4GHz 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 | 2-4 | | | GHz |
| Insertion Loss | | 1.3 | 1.7 | dB |
| Isolation | 40 | | | dB |
| Input VSWR | | 1.3 | 1.5 | - |
| Output VSWR | | 1.3 | 1.5 | - |
| 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 |

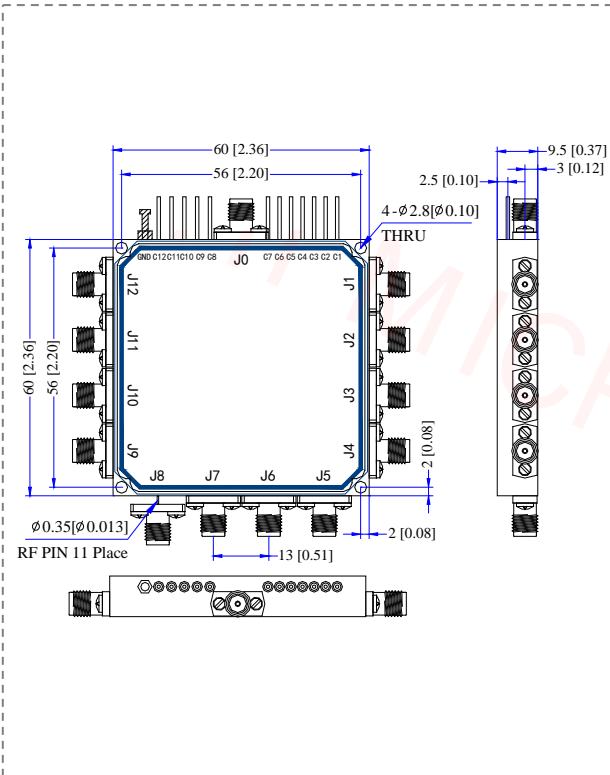


OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES



Outline Drawing

All Dimensions in mm (inches) Tolerance ± 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 |