



MODEL HISPDTR4554

45-54GHz Broadband PIN Switch

■ Features

- Ultra Wide Band: 45-54GHz
- Low Insertion Loss: 3dB
- High Isolation
- Switch Type: Reflection

■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

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

□ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range		45-54		GHz
Insertion Loss		2.8		dB
Loss Variation Over Temperature		0.003		dB/°C
Isolation		30		dB
Input VSWR		1.5	2.0	-
Output VSWR		1.5	2.0	-
Commutation time		50	100	ns
Power Handling (operational)			0.25	W
DC Current (Vcc=+5V/-5V)		50/50		mA
Control Logic TTL		0/+5		v
Impedance		50		Ω
Input Output Connector		1.85		
Material		Aluminium/Gold Painting		
Weight		50g		
Package Sealing		Standard sealing		

Environmental Conditions

Operational Temperature	-45°C~+85°C	Vibration	25g rms (15 degree 2KHz) endurance, 2 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	0.5W
ESD sensitivity (HBm)	Class 0, passed 150V

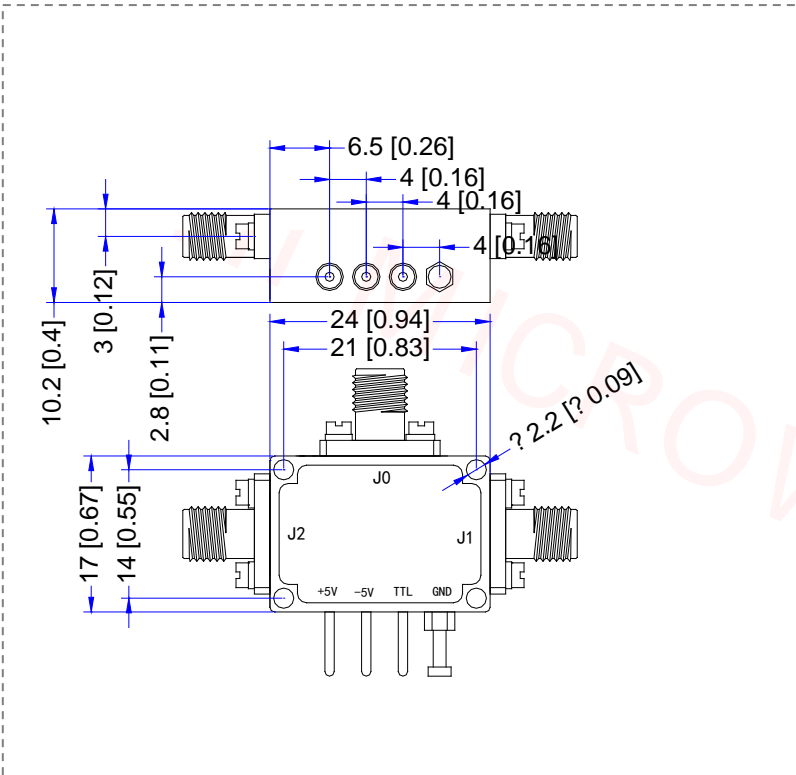


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DEVICES



Outline Drawing

All Dimensions in mm (inches) Tolerance ± 0.25 (0.01)



TTL Control Voltages & VDD	
Stage	Bias Condition
VDD	+5V ($\pm 10\%$)
VEE	-5V ($\pm 10\%$)
Low	0 to 0.8Vdc
High	2.0 to +5.0Vdc

Truth Table	
Control TTL Input	Signal Path State
C1	
0	J0-J1
1	J0-J2