MODEL HISPDTRT518
0.5-18GHz Broadband PIN Power Switch

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

Features

- Ultra Wide Band: 0.5-18GHz
- Low Insertion Loss: 2.4dB
- High Isolation
- Switch Type: Refelections

Applications

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range		0.5-18		GHz
Insertion Loss		≤1.4dB @2-4GHz ≤1.9dB @4-12GHz ≤2.4dB @12-18GHz		dB
Loss Variation Over Temperature		0.003		dB/℃
Isolation		≥60dB@2-12GHz ≥55dB@12-18GHz		dB
Input VSWR		1.5	2.0	-
Output VSWR		1.5	2.0	-
Commutation time		80	150	ns
Power Handling (operational)			0.25	W
IIP3	50	55		dBm
DC Current (Vcc=+5V/-12V)		100/100		mA
Control Logic TTL		0/+5		v
Impedance		50		Ω
Input Output Connector		SMA-k/SMA-K		
Material		Aluminium/Gold Painting		
Weight		50g		
Altitude		70Kft		
Package Sealing		hermetic sealing(laser seal welding)		

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☐ Environmental Conditions

Operational Temperature	-45℃~+85℃	**Vibration**	25g rms (15 degree 2KHz) endurance, 2 hour per axis
Storage Temperature	-55℃~+125℃	**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℃

☐ Absolute Maximum Ratings

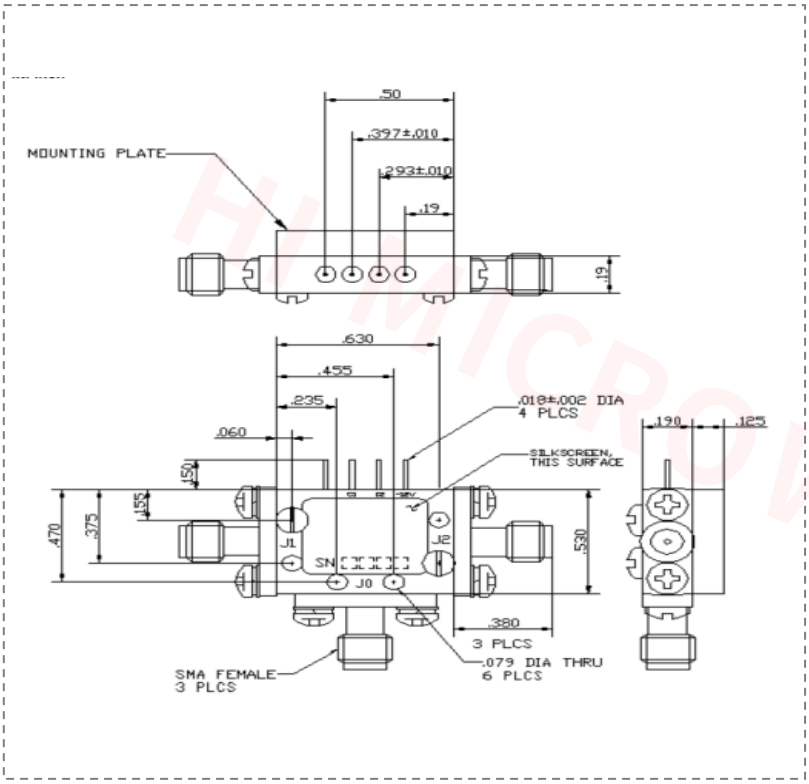
Supply Bias Voltage	+/-5%
RF INPUT POWER	0.5W
ESD sensitivity (HBm)	Class 0, passed 150V

OBSERVE PRECAUTIONS ELECTROSTATIC SENSITIVE DEVICES

RoHS Compliant

☐ Outline Drawing

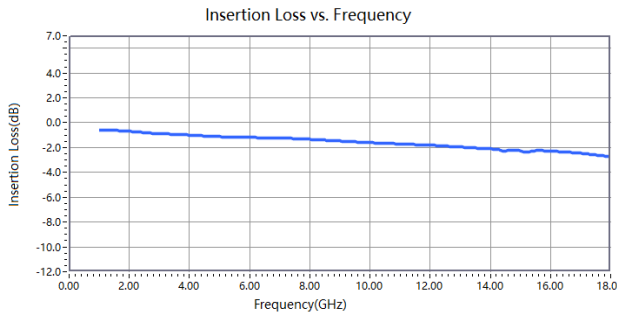
All Dimensions in mm (inches) Tolerance ±0.25 (0.01)

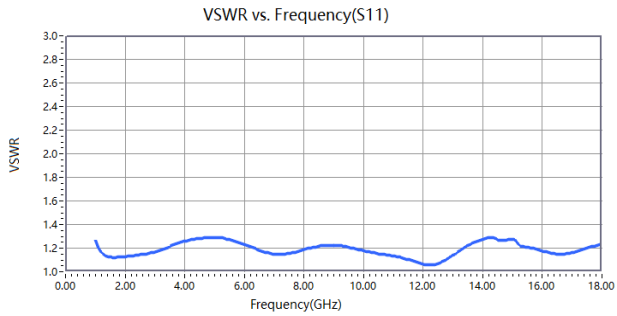


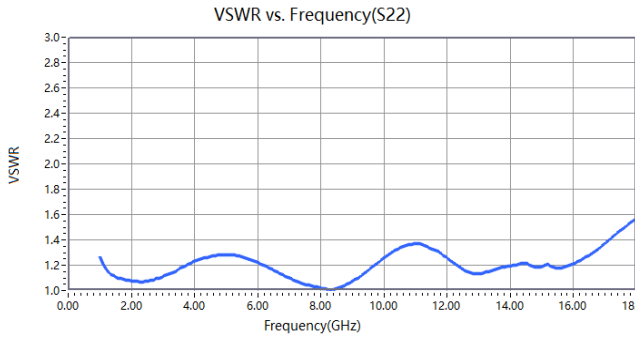
TTL Control Voltages &VDD	
Stage	Bias Condition
VDD	+5V (±5%)
VEE	-12V(±5%)
Low	0 to 0.8Vdc
High	2.0 to +5.0Vdc

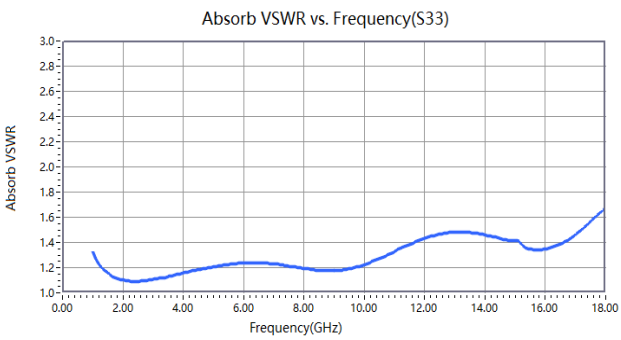
Truth Table	
Control TTL Input C1	Signal Path State
0	J0-J1
1	**J0-J2**

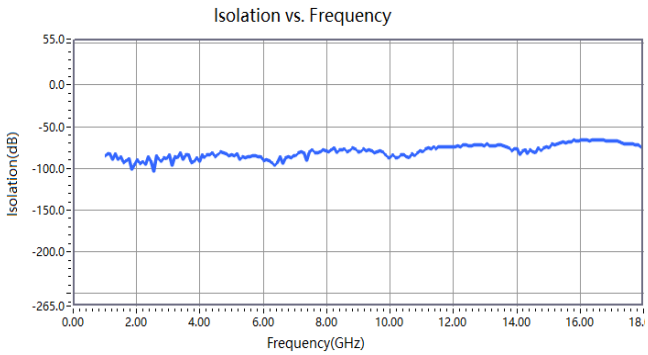
Typical Performance

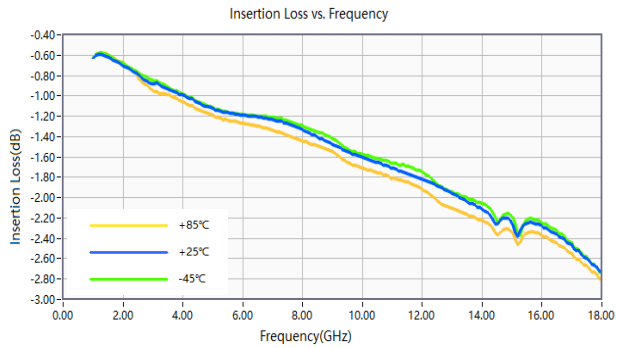


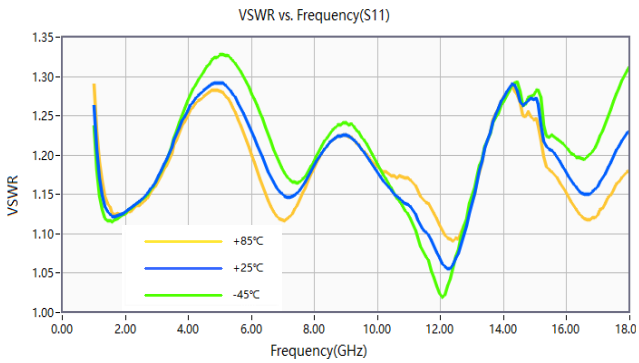


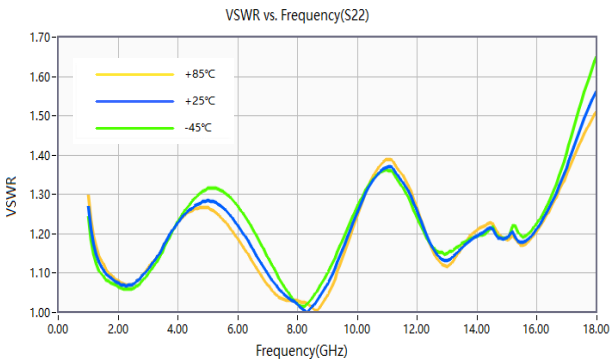












Typical Performance