



## U Band SPST PIN Switch with TTL Driver, Absorptive

### Description:

**Model SKS-4535533030-VFVF-AA** is a U band reflective PIN diode based, single pole, single throw (SPST) switch with a TTL driver that operates between 45 and 55 GHz. This model offers a typical insertion loss of 3.0 dB and 30 dB port-to-port isolation with a typical switching speed of 100 nanoseconds. The switch has female V connectors for all RF ports and solder pins for DC bias and TTL control.



### Features:

- High Isolation
- Compact Size
- Fast Control Speed

### Applications:

- 5G Systems
- Radar Systems
- Communication Systems
- Automatic Test Set
- Switching Network

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	45 GHz		55 GHz
Insertion Loss		3.0 dB	
Return Loss		10 dB	
Isolation		30 dB	
Operational RF Input Power			+20 dBm
Damage RF Input Power			+27 dBm
Bias Voltage		$\pm 5 V_{DC}$	
Bias Current		50/50 mA	
Control		TTL	
Switching Speed		100 ns	
Specification Temperature		+25 °C	
Operation Temperature	-45 °C		+85 °C

### Mechanical Specifications:

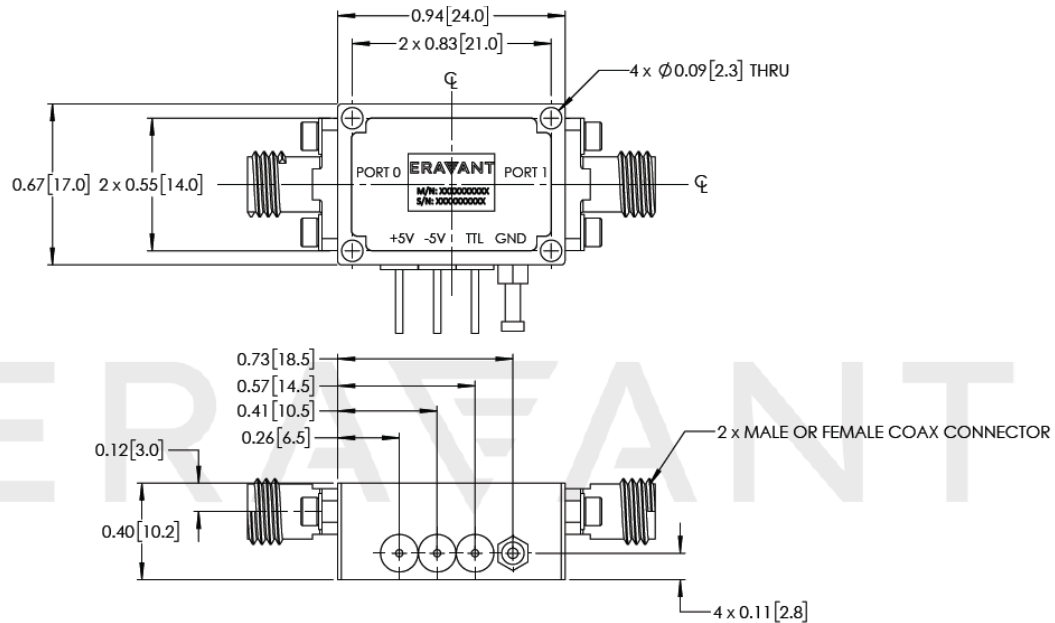
Item	Specification
Input Port	K(F)
Output Port	K(F)
Bias	Solder Pins
Logic Input	Solder Pins
Case Material	Aluminum
Finish	Gold Plated
Weight	1.06 Oz
Size	1.18" (L) X 1.00" (W) X 0.40" (H)
Outline	KS-AC-Z1





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**Mechanical Outline:** (Unless otherwise specified, all dimensions are in inches [millimeters])



Truth Table	
CONTROL TTL INPUT (C1)	SIGNAL PATH STATE
0	PORT 0 - PORT 1
1	OFF

**Note:**

- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25 °C case temperature.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

**Caution:**

- Exceeding absolute maximum ratings shown will damage the device.
- The switch is a static sensitive device. Always follow ESD rules when working with the switch.
- Proper torque, 8.0 ± 0.4 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Torque wrench, model SCH-08008-S1, is highly recommended.**

