SKS-9031445025-0808-A1-M

Rev 1.0

SPST Absorptive Switch with TTL Driver, 90 to 140 GHz

Description:

Model SKS-9031445025-0808-A1-M is a F-Band, single pole single throw absorptive switch. The switch exhibits 4 dB typical insertion loss and 25 dB nominal isolation across the frequency range of 90 to 140 GHz. The control voltage of the standard model is TTL. The RF input and output ports are WR-08 waveguides with UG-387/U-M anti-cocking flanges, and a female SMA coaxial connector provides the control signal.

Features:

- Full Waveguide Frequency Operation
- High Isolation

Applications:

- THz Systems
- Testing Equipment

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	90 GHz		140 GHz
Insertion Loss		4 dB	
Isolation		25 dB	
Power Handling			+8 dBm
Control Signal		TTL	
Switching Speed		100 ns	
Positive Bias (Vdd)			+1 V_{DC}/3 mA
Negative Bias (Vee)	-4 V_{DC}/<0 mA	-1 V_{DC}/<0 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-08 Waveguide with UG-387/U-M Anti-Cocking Flange
TTL	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	0.8 Oz
Size	1.00” (L) X 1.00” (W) X 0.75” (H)
Outline	KS-RF-A

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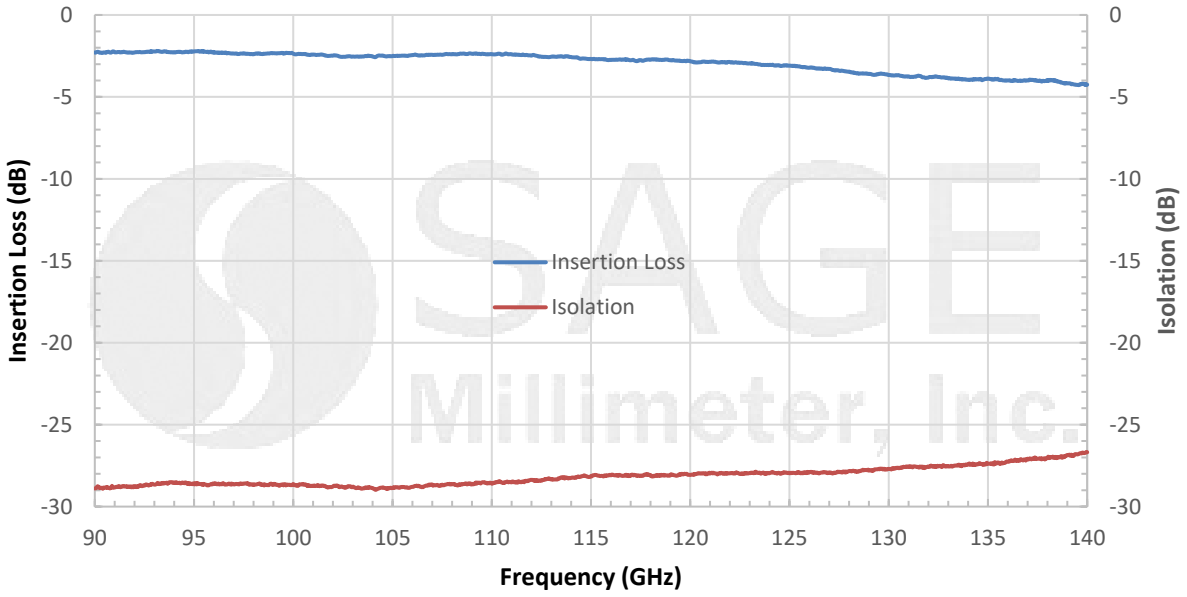
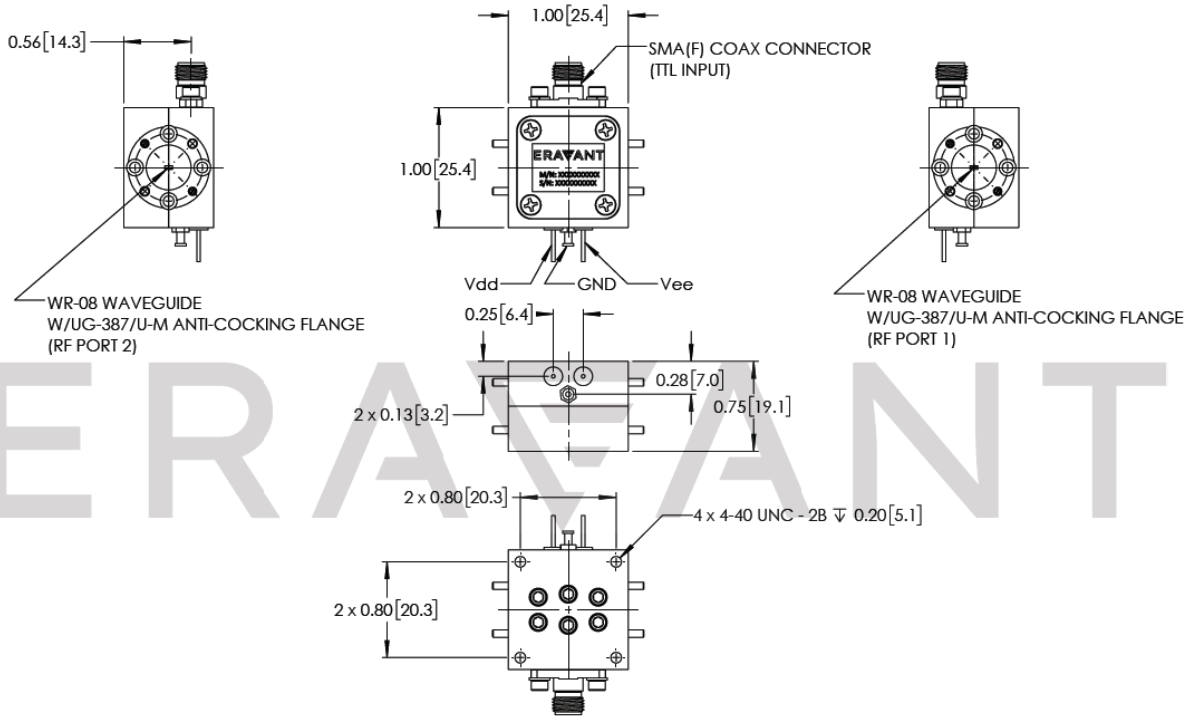
Insertion Loss and Isolation vs. Frequency

Bias: +1 VDC/3 mA and +1 VDC/<0 mA



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



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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 attenuator is a static sensitive device. Always follow ESD rules when working with the attenuator.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**