SKS-2734032030-2828-R1

Rev. 1.1

SPST PIN Switch with TTL Driver, Ka Band, Reflective

Description:

Model SKS-2734032030-2828-R1 is a PIN diode based, single pole, single throw (SPST) switch with a TTL driver that covers 26.5 and 40 GHz. This model offers a low insertion loss of 2.0 dB with a typical isolation of 30 dB. The SPST switch has a WR-28 waveguide with UG-599/U flanges at the RF input and output and an SMA(F) connector for TTL control. The SPST switch can be modified for various operational frequencies under different model numbers.

Features:

- Low Insertion Loss
- High Isolation
- Fast Control Speed

Applications:

- Radar Systems
- Communication Systems
- Automatic Test Set

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	26.5 GHz		40 GHz
Insertion Loss		2.0 dB	
Isolation		30 dB	
Power Handling		+20 dBm	+23 dBm
Bias Voltage		±5 V_{DC}	
Bias Current		10 mA	
Control Signal		TTL	
Switching Speed		100 nS	
Specification Temperature		+25 °C	
Operating Temperature	-25 °C		+65 °C

Mechanical Specifications:

Item	Specification
RF Interface	WR-28 Waveguide with UG-599/U Flange
TTL Control Port	SMA(F)
Case Material	Aluminum
Finishing	Gold Plated
Weight	1.0 Oz
Insertion Length	1.25”
Outline	KS-RA

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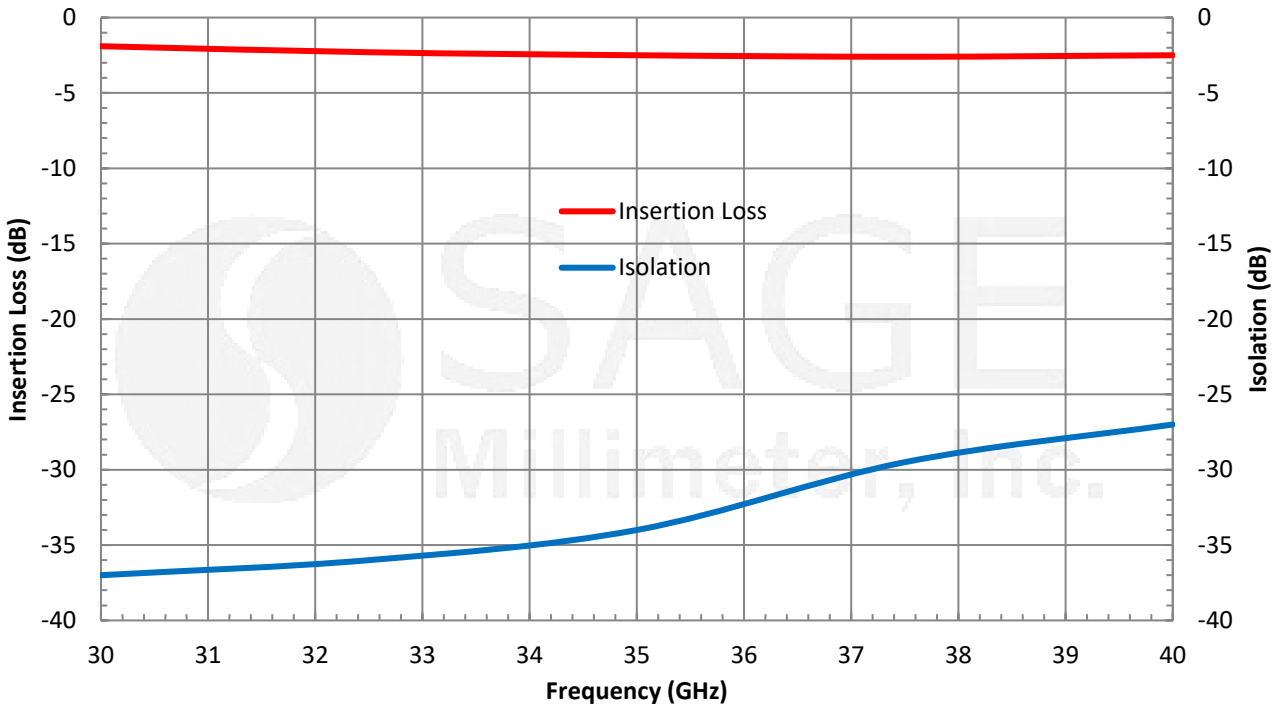
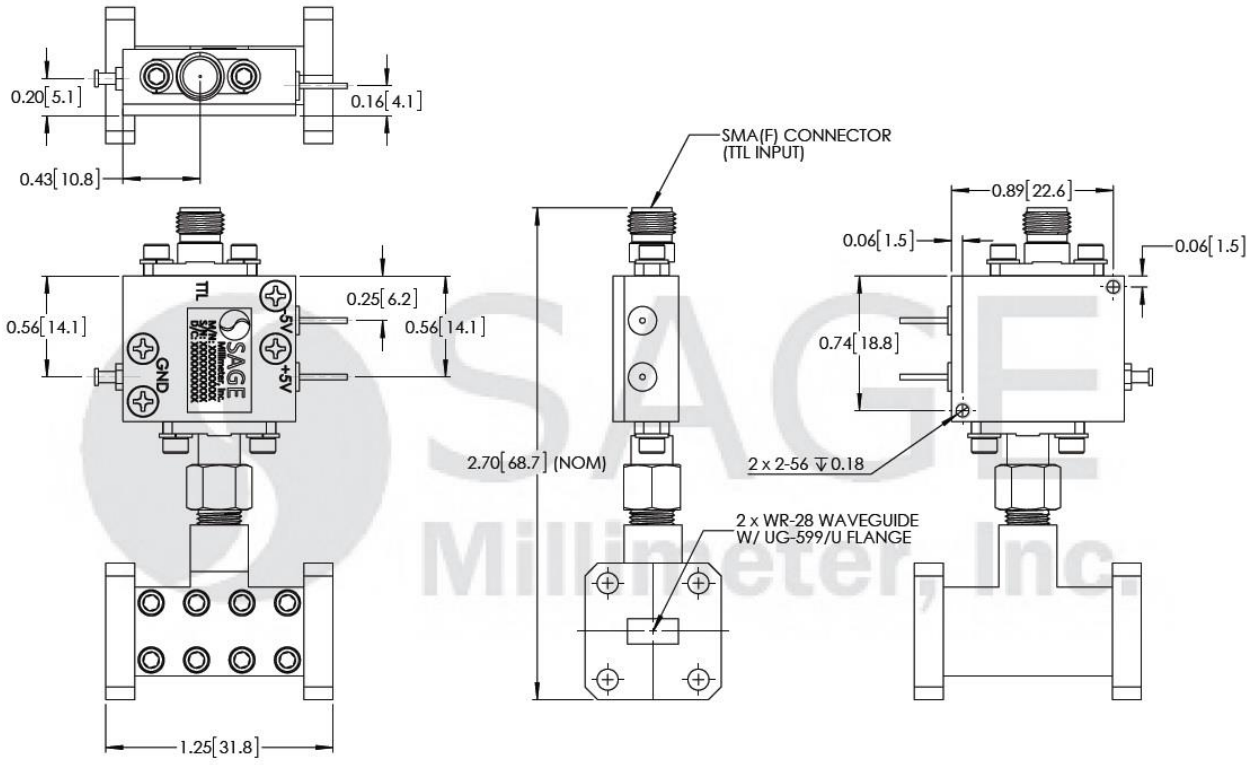
Typical Insertion Loss and Isolation vs. Frequency



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.
- SAGE Millimeter, Inc. 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.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.92 ± 0.05 Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

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