SKD-1834034040-KFKF-R1

Rev. 1.0

SPDT PIN Switch with TTL Driver, 18 to 40 GHz, Reflective

Description:

Model SKD-1834034040-KFKF-R1 is a reflective PIN diode based, single pole, double throw (SPDT) switch with a TTL driver that operates from 18 to 40 GHz. The switch requires a separate -5 V and +5 V biasing in addition to the TTL control. This model has an insertion loss of 4.0 dB typical and an isolation of 40 dB nominal at its center frequency. The SPDT switch features female K connectors for all RF ports and a female SMA connector for TTL control on the driver. The switch can be modified for various operational frequencies under different model numbers.

Features:

- 18 to 40 GHz Broad Bandwidth
- Low Insertion Loss
- High Isolation

Applications:

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz		40 GHz
Insertion Loss		4.0 dB	
Isolation		40 dB	
Power Handling			+23 dBm
Bias Voltage		±5 V_{DC}	
Bias Current		30 mA	
Switching Speed		100 nS	
Specification Temperature		+25 ˚C	
Operating Temperature	-25 ˚C		+65 ˚C

Mechanical Specifications:

Item	Specification
Input Port	K(F)
Output Port	K(F)
TTL Control	SMA (F)
Case Material	Aluminum
Finish	Gold Plated
Weight	1.3 Oz
Size	1.40” (L) X 1.20” (W) X 0.50” (H)
Outline	KD-RC

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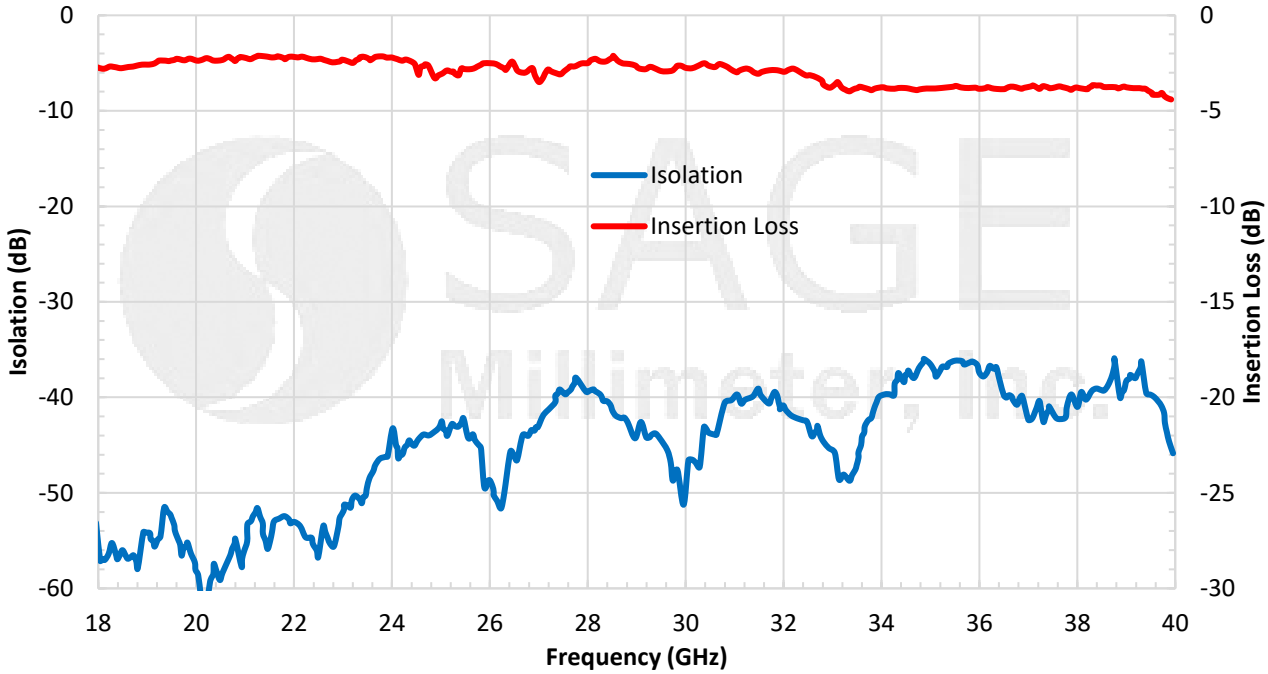
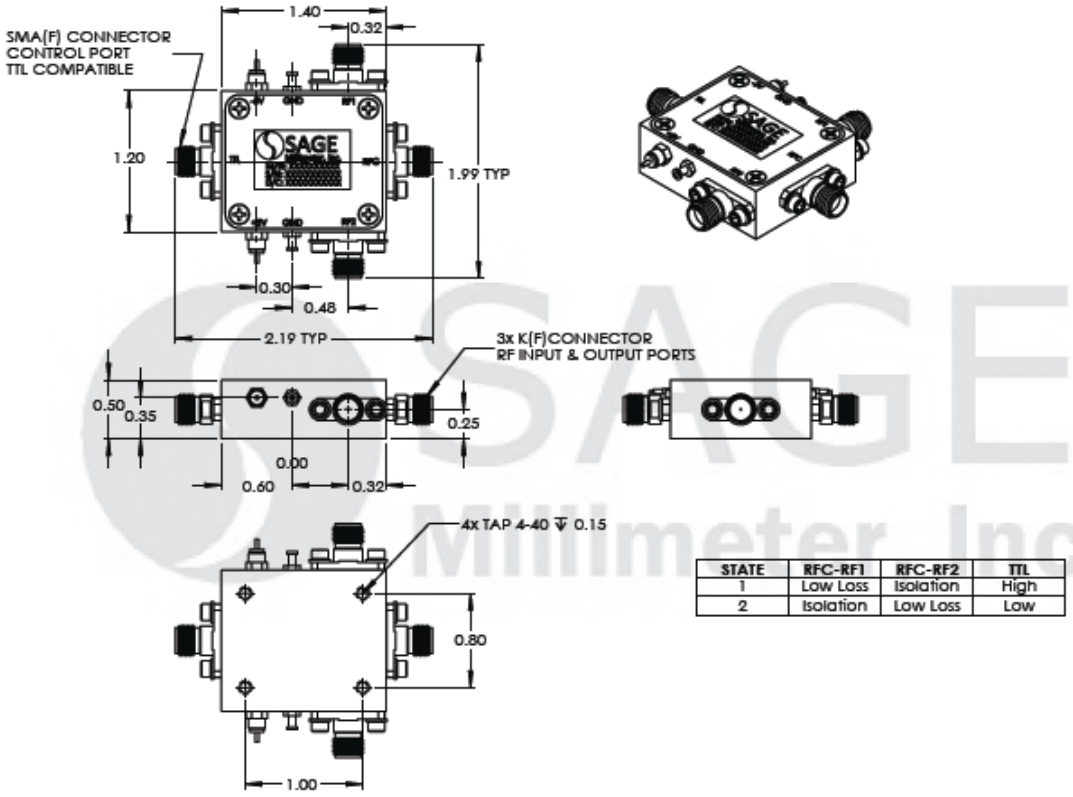
Typical Performance vs. Frequency



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



STATE	RFC-RF1	RFC-RF2	TTL
1	Low Loss	Isolation	High
2	Isolation	Low Loss	Low

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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.
- 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.**