

SK8-0525038048-2F2F-A9

SP8T PIN Switch with TTL Driver, Absorptive, 0.5 to 50 GHz
3-Bit Control

SK8-0525038048-2F2F-A9 is an absorptive PIN diode based, single pole, eight throw switch with a TTL driver that operates between 0.5 and 50 GHz. The switch requires a separate -5 V and +5 V biasing in addition to the 3-Bit TTL control. This model offers in-line 8 output ports, typical 8 dB insertion loss, and 48 dB typical isolation with a typical switching speed of 100 nanoseconds. The switch has 2.4 mm female connectors for all RF ports and Micro-D15 Female connector for bias and TTL control.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.5 GHz		50 GHz
Insertion Loss @0.5-30 GHz		6 dB	
Insertion Loss @30-50 GHz		8 dB	
Isolation @ 0.5-30 GHz	45 dB	50 dB	
Isolation @ 30-50 GHz	43 dB	48 dB	
Return Loss		8 dB	
RF Input Power			+20 dBm
Bias (Positive)	+4.75 V _{DC}	+5.00 V _{DC} /350 mA	+5.25 V _{DC}
Bias (Negative)	-5.25 V _{DC}	-5.00 V _{DC} /30 mA	-4.75 V _{DC}
Control		3-Bit TTL	
TTL High	+2.0 V _{DC}		+5.0 V _{DC}
TTL Low	0 V _{DC}		+0.8 V _{DC}
Switching Speed		100 ns	
Switch Type		Absorptive	
Specification Temperature		+25 °C	
Operating Temperature	-25 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	2.4 mm Female
Bias & Control Port	Micro-D15 Female
Case Material	Aluminum
Finish	Gold Plated
Outline	K8-AC-Z3

ECCN

EAR99

FEATURES

- Low Insertion Loss
- High Isolation
- Absorptive
- TTL Controlled

APPLICATIONS

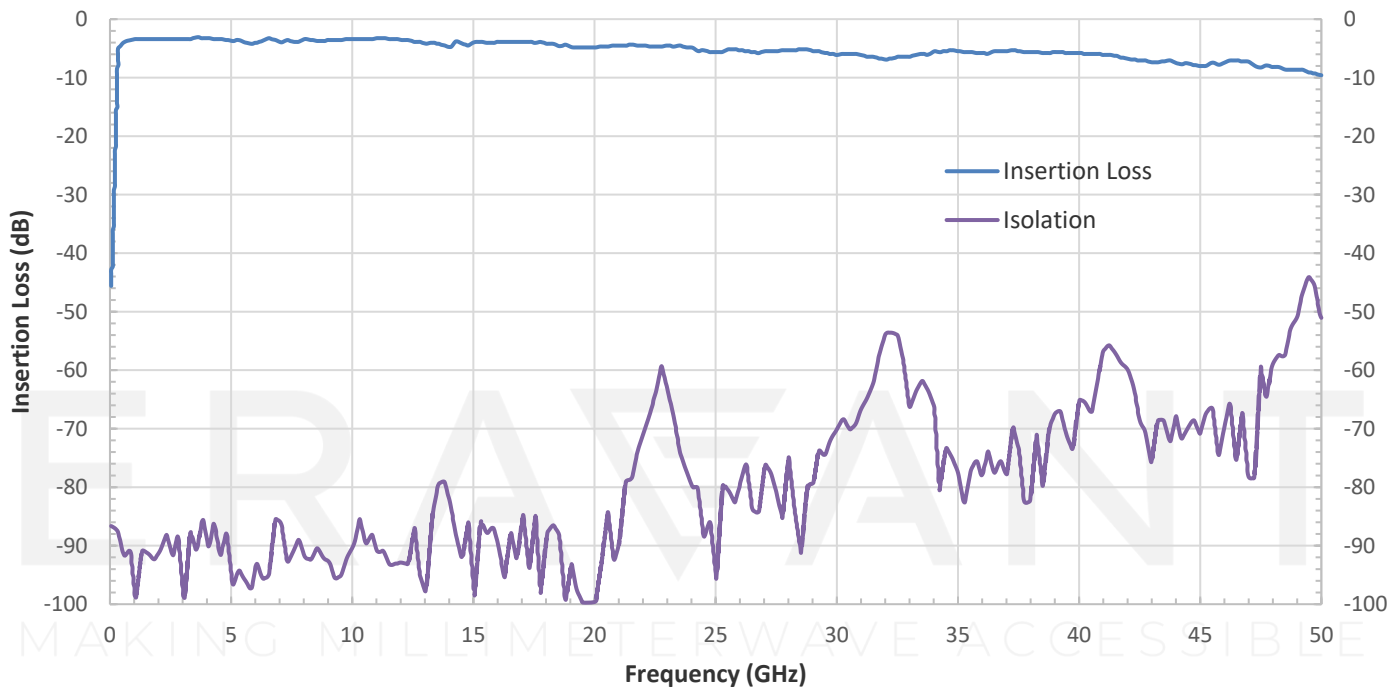
- Automatic Test Equipment
- Switching Network

SUPPLEMENTAL DETAILS

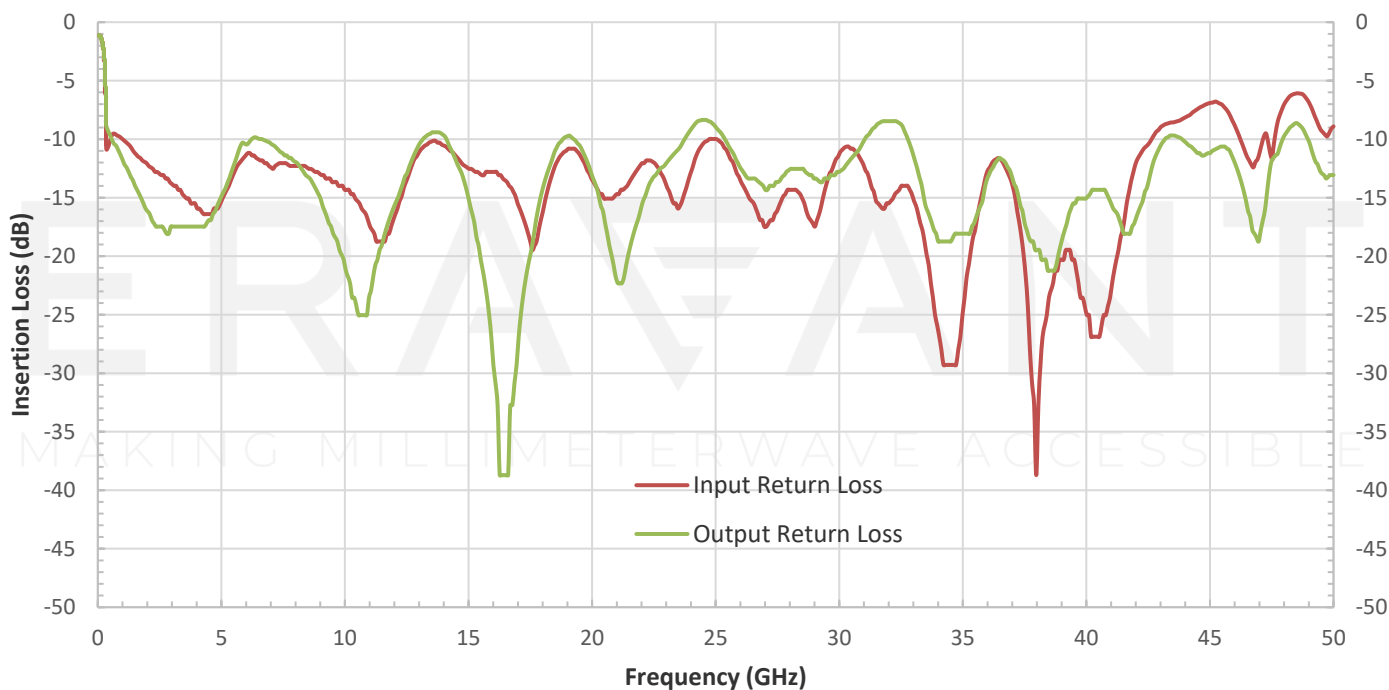


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Typical Performance vs. Frequency

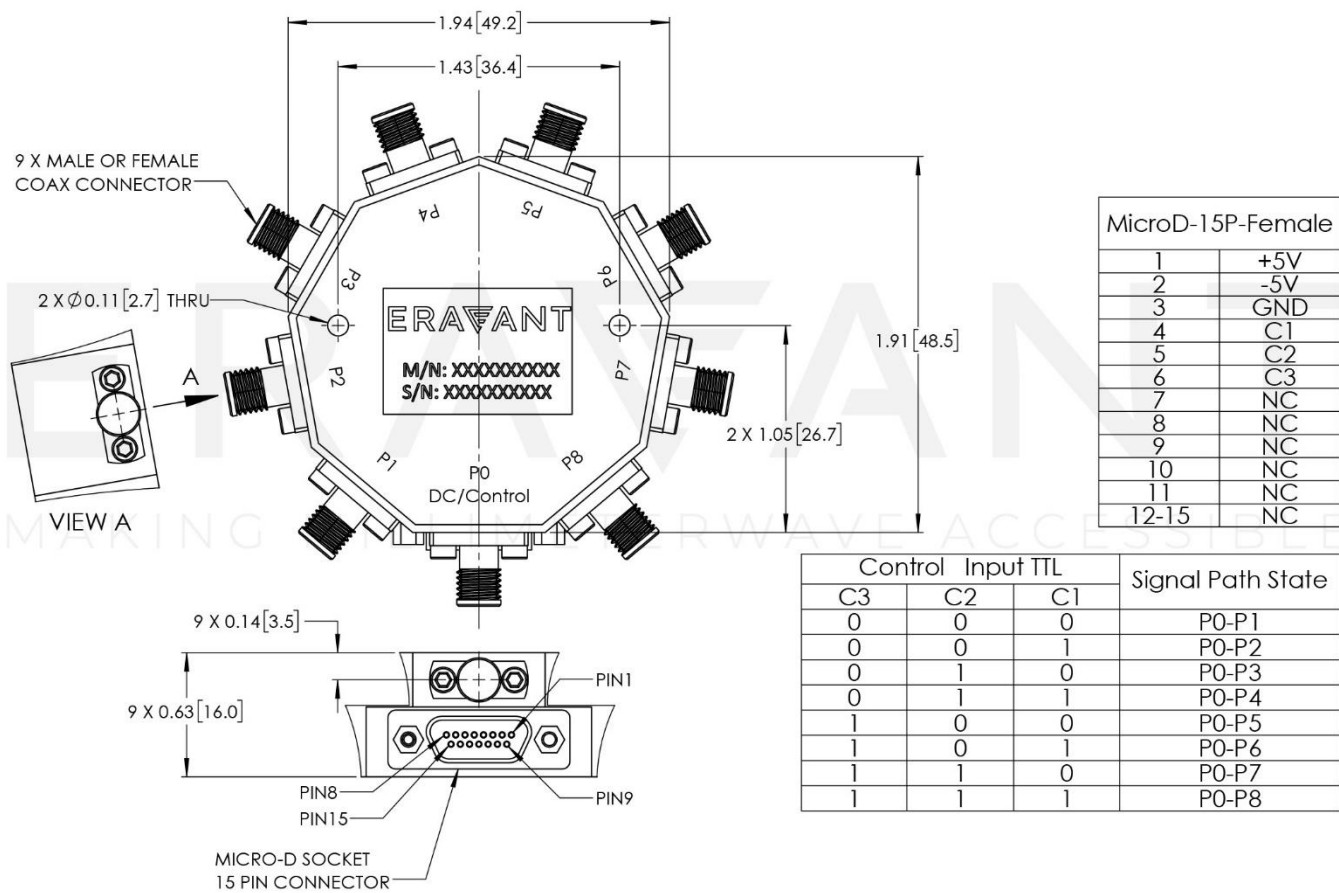


Typical Performance vs. Frequency



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



NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- 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 static sensitive device. Always follow ESD rules when working with the switch.
- Reversing polarity will destroy the device.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.