

SPST Reflective Switch with TTL Drive, 170 to 260 GHz

SKS-1742646035-0404-R1-M is a single pole, single throw (SPST) reflective switch with a TTL driver that covers 170 to 260 GHz. This model offers an insertion loss of 6 dB with a typical isolation of 35 dB. The SPST switch has a WR-04 waveguide with UG-387/U-M anticocking flanges at the RF input and output and a female SMA connector for TTL control. The SPST switch can be modified for various operational frequencies under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Frequency	170 GHz		260 GHz
Insertion Loss		6 dB	
Isolation		35 dB	
Power Handling			+5 dBm
Control Signal		TTL	
Switching Speed		100 ns	
Positive Bias (Vdd)			+1 V _{DC} /3 mA
Negative Bias (Vee)		-2 V _{DC} /<0 mA	
Specification Temperature		+25°C	
Operating Temperature	0°C		+50°C

Mechanical Specifications:

Item	Specification		
RF Ports	WR-04 Waveguide with UG-387/U-M Anti-Cocking Flange		
Bias Port	Feed Through Pins		
TTL Control Port	SMA (F)		
Case Material	Aluminum		
Finish	Gold Plated		
Weight	0.8 Oz		
Size	1.00" (L) X 1.00" (W) X 0.75" (H)		
Outline	KS-R04-A		

ECCN

EAR99

FEATURES

- High Isolation
- Fast Control Speed

APPLICATIONS

- THz Systems
- Testing Equipment

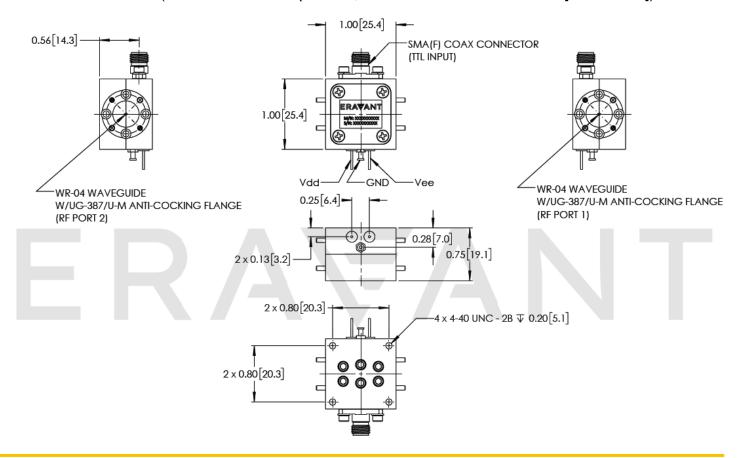
SUPPLEMENTAL DETAILS







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.
- 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.
- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- 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 $(0.90 \pm 0.02 \text{ Nm})$. Torque wrench model <u>SCH-08008-S1</u> is highly recommended.

MAKING MILLIMETERWAVE ACCESSIBLE