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## 26.5-40 GHz Reflective Waveguide SPST Switch

### Features

- Full Ka-Band Operation
- High Speed
- TTL Control
- 40dB Isolation (typ.)
- 1dB I.L. @35 GHz. (typ.)
- +23dBm Power Handling
- WR-28 Standard Flanges



### Applications

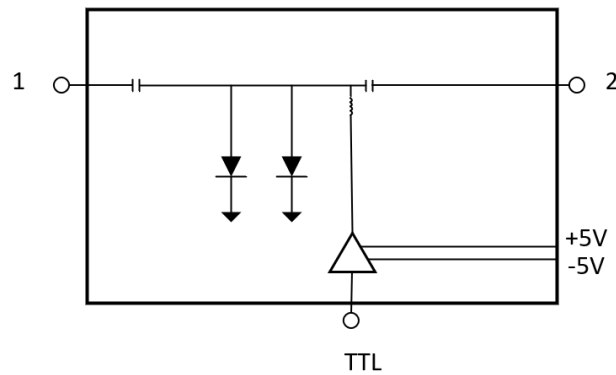
Operating over Ka band, 26.5 GHz to 40 GHz, these compact, high speed, medium power, SPST switches are ideal for applications such as Ka-band radars and RF test and measurement setups. In pulsed radar, these switches, used in the transmitter path, serve to mute idle transmitter noise during receive intervals that can leak into the radar's receiver from the transmitter and reduce radar sensitivity. They can also be used in the receiver path to protect the low noise amplifier from damage from transmitter pulse power during transmit intervals. The insertion loss of these switches is typically 1dB between 29 and 38 GHz. This low loss minimizes the impact on overall radar performance as any additional loss in the switch raises the level of the radar's minimum detectable signal. Fast switching in pulsed radar applications is critical to minimizing radar "blind range" that results from the time of travel of the pulse while the radar switches from transmitting to receiving. This product is rated for up to 200mW or 23 dBm of RF power. For higher power applications please contact the factory for additional product alternatives. The switch uses shunt diodes in the RF path to achieve isolation and can be operated in either direction. An internal TTL driver provides a simple hardware interface operating from +5V and -5V power supplies. At 60mW of typical power consumption, the switches are ideal for applications where low power is essential. Two mounting holes for either #4 or M3 fasteners can be used for attaching the device to a bracket or baseplate.

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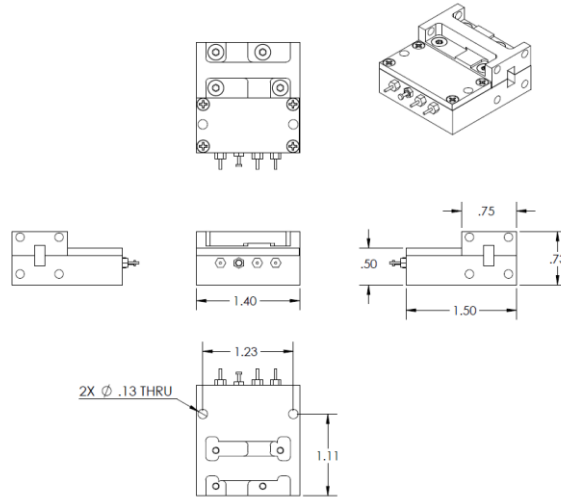
## Specifications

Parameter	Specification @25C	Notes
Frequency Range	26.5-40 GHz	
Isolation	40dB typ.	
Insertion Loss	1.0dB typ., 29-38 GHz 1.5dB typ., 26.5 to 40 GHz	See typ. plot
RF Connectors	WR-28	Bi-Directional
Switching Speed	<20ns	
Input	TTL	
Supply Voltage	+5V, -5V	+/-6mA typ.
Max Power	23dBm CW	
Temp. Range	-20 to +50C operation	
Housing Material	Gold-plated Aluminum 6061	

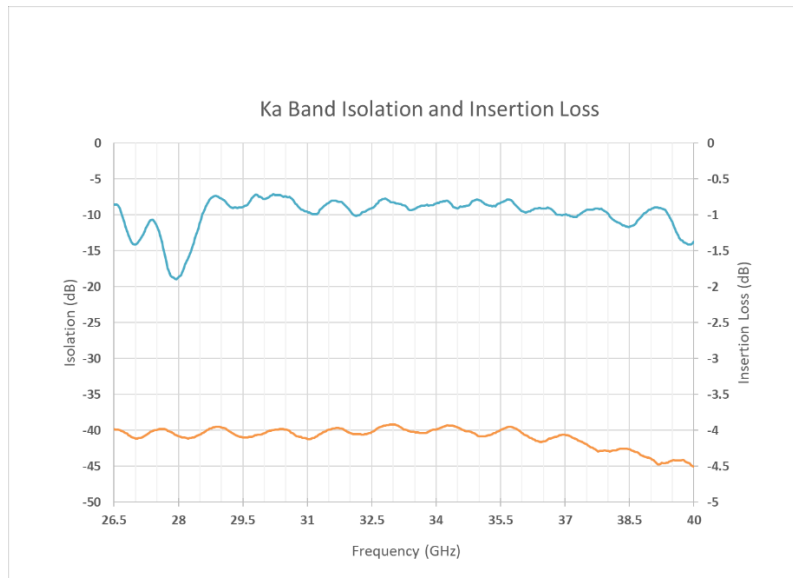
## Block Diagram



### Outline Drawing (Inches)



### Measured Data



### Ordering Information

200384-01	26.5-40 GHz Reflective Waveguide Switch
Export	EAR99

Specifications subject to change without notice.