



## Electrical Limiter, 0.5 to 45 GHz, 2.5 dB Insertion Loss, +18 dBm Power Leakage

### Description:

**Model SKL-0524531836-KFKF-D1-M** is an electrical limiter that utilizes a high-performance GaAs Schottky diode MMIC chip to offer high performance power-limiting function. The limiter can limit input power up to +36 dBm to a maximum leakage power of +18 dBm to protect any power sensitive components, such as mixers, low noise amplifiers, switches etc. from possible power damage. The limiter supports wide band operation from 0.5 to 45 GHz and offers a typical insertion loss of 2.5 dB. The limiter is a passive device and requires no DC power. The RF connectors are female 2.92 mm connectors. Other port configurations, such as in-line waveguide interfaces with Uni-Guide™ technology are readily available under different model numbers.



### Features:

- Wide Band Coverage
- Low Insertion Loss
- High Input Power Handling

### Applications:

- 5G Systems
- Radar Systems
- Communication systems
- Test Equipment

### Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Frequency	0.5 GHz		45 GHz
Insertion Loss		2.5 dB	
Return Loss		10 dB	
Leakage Power*			+18 dBm
Maximum Limiting Power			+36 dBm
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

\*Input power: +30 dBm

### Mechanical Specifications:

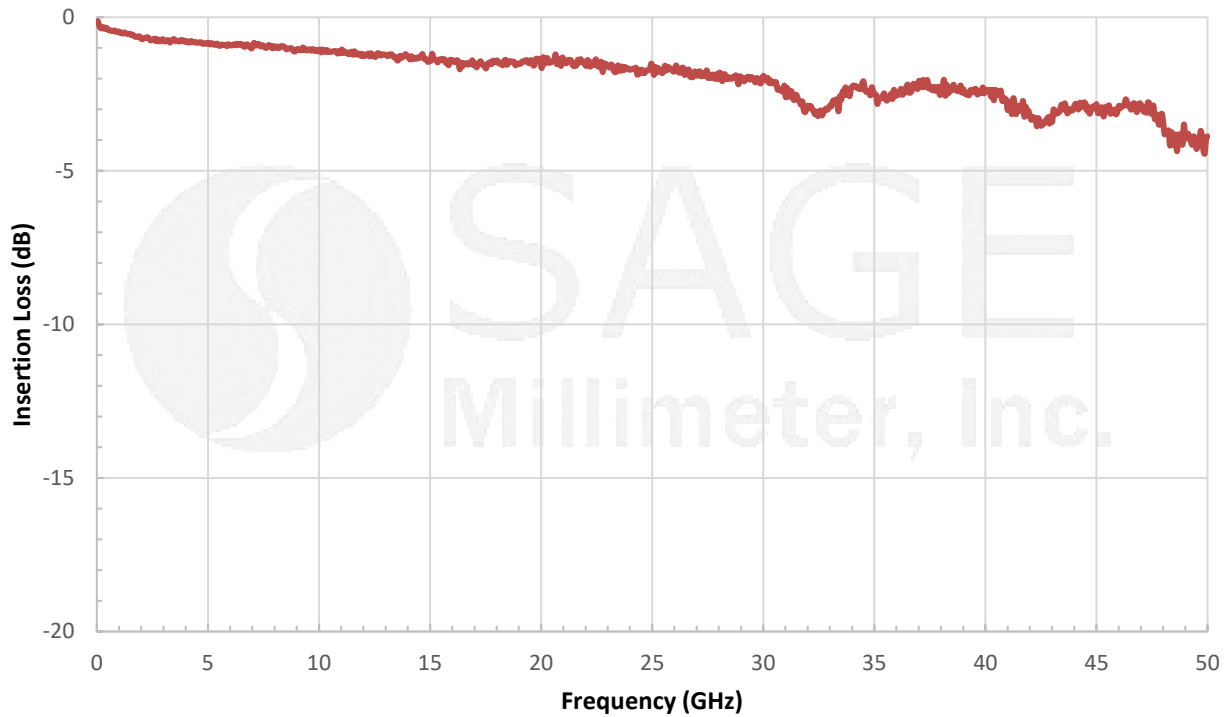
Item	Specification
Input (Port 1)	K(F)
Output (Port 2)	K(F)
Case Material	Aluminum
Finish	Gold Plated
Weight	0.6 Oz
Size	0.80" (L) X 0.80" (W) X 0.39" (H)
Outline	UH-235-2C





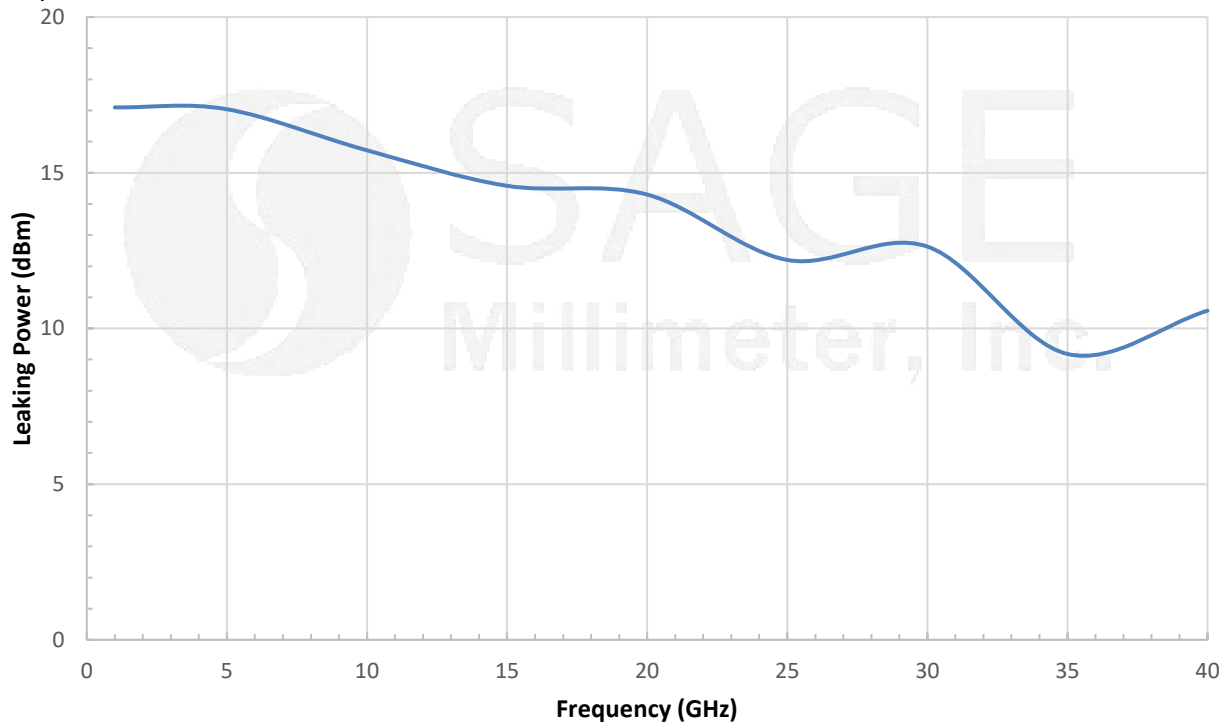
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### Typical Insertion Loss vs. Frequency



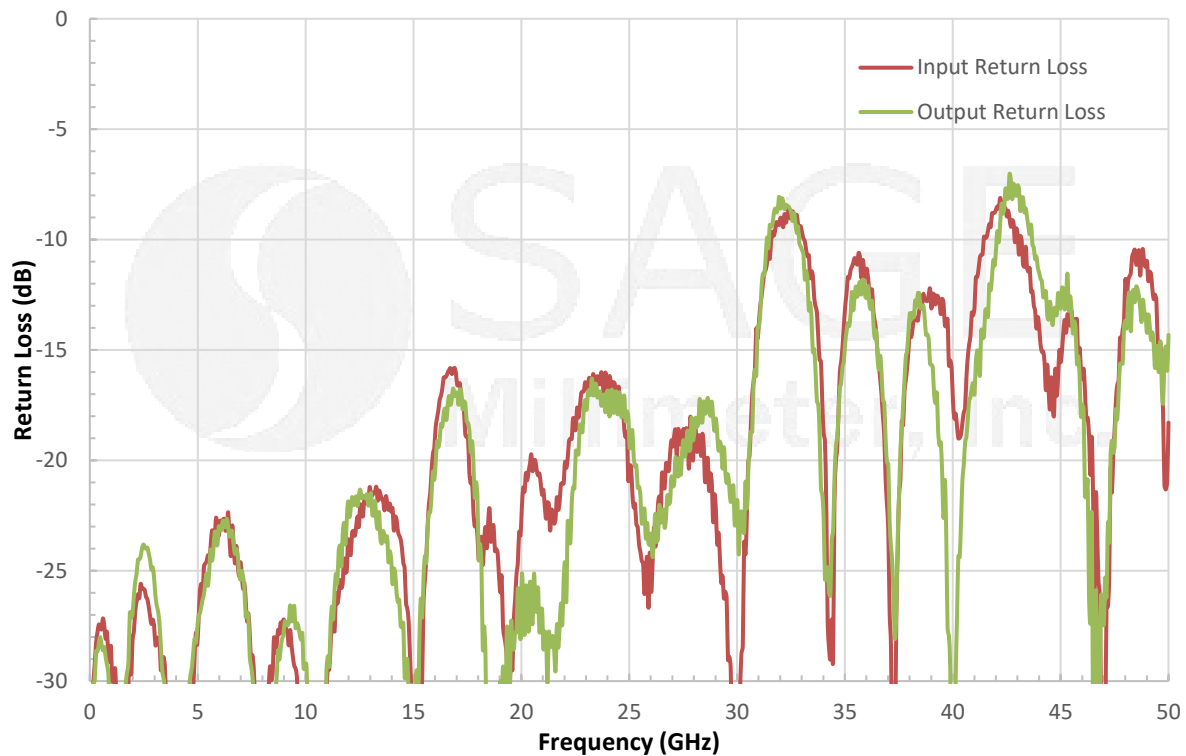
### Typical Leakage Power vs. Frequency

Input Power: +20 dBm

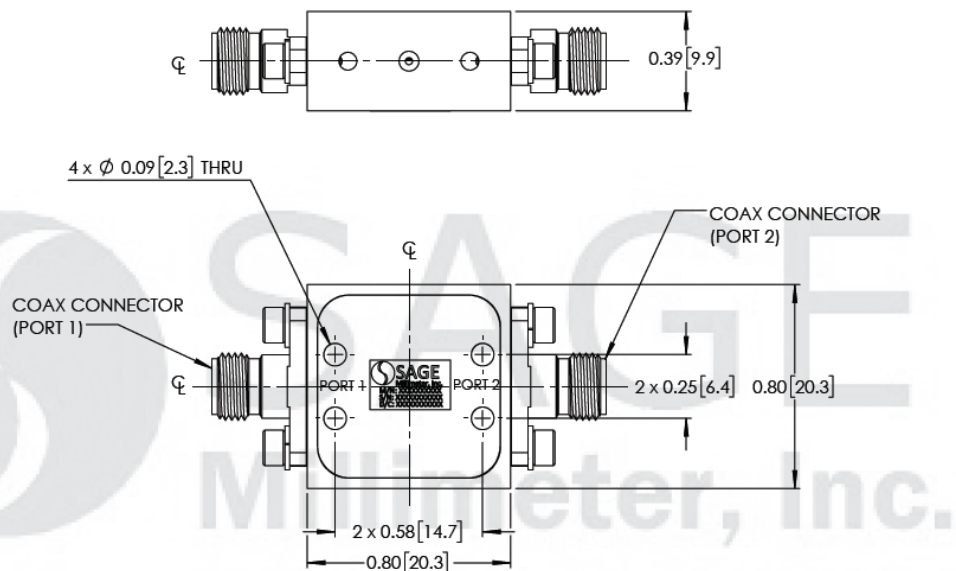


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### Typical Return Loss vs. Frequency



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



NOTE:  
COAX CAN BE MALE OR FEMALE



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### Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Proper torque,  $8.0 \pm 0.15$  inch-pounds ( $0.90 \pm 0.02$  Nm), should be applied. **SAGE Millimeter torque wrench, model SCH-08008-S1, is highly recommended.**

