

# D-Band Fixed Attenuator, 3 dB

## **Description:**

Model STA-03-06-F3 is a 3 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 3 dB at center frequency, 140 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### **Features:**

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

## **Applications:**

- Test Lab
- Instrumentations
- System Integration

## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
RF Frequency Range	110 GHz		170 GHz
Insertion Loss @ 140 GHz		3.0 dB	
VSWR		1.2:1	1.3:1
Power Handling			300 mW
Specification Temperature	_ / \	+25°C	
Operating Temperature	-40°C	and the same of	+85°C

# **Mechanical Specifications:**

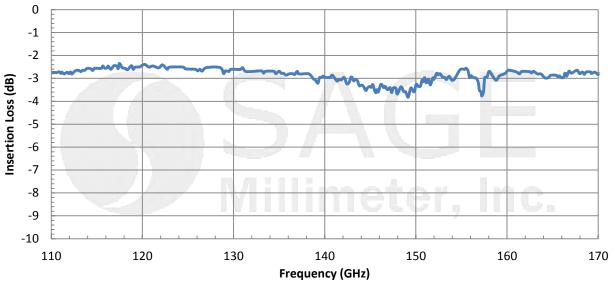
Item	Specification	
RF Input	WR-06 Waveguide with UG-387/U-M Flange	
RF Output	WR-06 Waveguide with UG-387/U-M Flange	
Setting	Fixed	
Insertion Length	1.60"	
Finish	Gold Plated	
Weight	0.8 Oz	
Outline	TA-FD-L1	



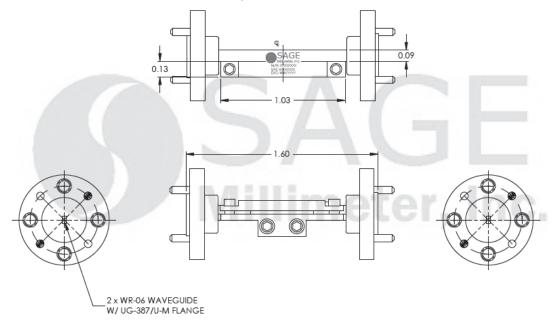
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# D-Band Fixed Attenuator, 3 dB

# **Typical Insertion Loss vs. Frequency**



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



### Note:

- All data was presented using a limited sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- RF power should never exceed 300 mW.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.



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## D-Band Fixed Attenuator, 6 dB

## **Description:**

Model STA-06-06-F3 is a 6 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 6 dB at center frequency, 140 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### **Features:**

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

## **Applications:**

- Test Lab
- Instrumentations
- System Integration

## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
RF Frequency Range	110 GHz		170 GHz
Insertion Loss @ 140 GHz		6.0 dB	
VSWR		1.2:1	1.3:1
Power Handling			300 mW
Specification Temperature	_ / 1	+25°C	
Operating Temperature	-40°C	a transport	+85°C

# **Mechanical Specifications:**

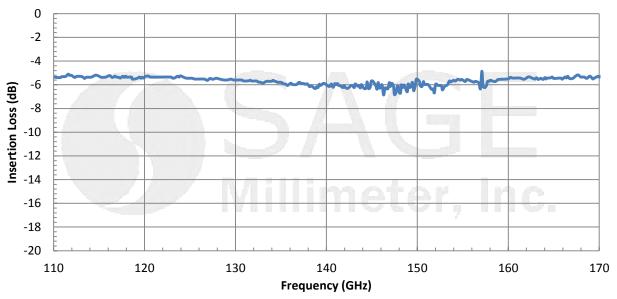
Item	Specification	
RF Input	WR-06 Waveguide with UG-387/U-M Flange	
RF Output	WR-06 Waveguide with UG-387/U-M Flange	
Setting	Fixed	
Insertion Length	1.60"	
Finish	Gold Plated	
Weight	0.8 Oz	
Outline	TA-FD-L1	



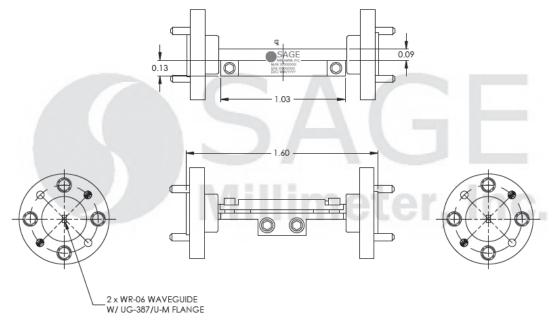
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# D-Band Fixed Attenuator, 6 dB

## **Typical Insertion Loss vs. Frequency**



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



#### Note:

- All data was presented using a limited sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

#### **Caution:**

- RF power should never exceed 300 mW.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.



# D-Band Fixed Attenuator, 10 dB

### **Description:**

Model STA-10-06-F3 is a 10 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 10 dB at center frequency, 140 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### **Features:**

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

## **Applications:**

- Test Lab
- Instrumentations
- System Integration

## **Electrical Specifications:**

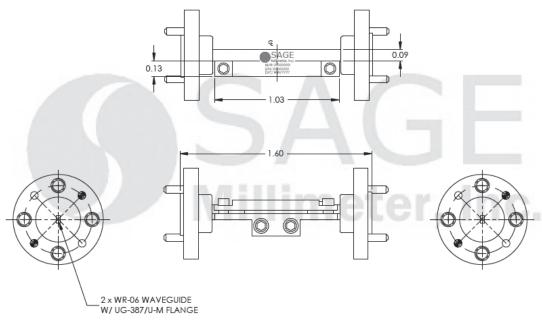
Parameter	Minimum	Typical	Maximum
RF Frequency Range	110 GHz		170 GHz
Insertion Loss @ 140 GHz		10.0 dB	
VSWR		1.2:1	1.3:1
Power Handling			300 mW
Specification Temperature		+25°C	
Operating Temperature	-40°C	a demand	+85°C

# **Mechanical Specifications:**

Specification
WR-06 Waveguide with UG-387/U-M Flange
WR-06 Waveguide with UG-387/U-M Flange
Fixed
1.60"
Gold Plated
0.8 Oz
TA-FD-L1

# D-Band Fixed Attenuator, 10 dB

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



### Note:

• SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### **Caution:**

- RF power should never exceed 300 mW.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.





# D-Band Fixed Attenuator, 20 dB

### **Description:**

Model STA-20-06-F3 is a 20 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 20 dB at center frequency, 140 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### **Features:**

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

## **Applications:**

- Test Lab
- Instrumentations
- System Integration

# **Electrical Specifications:**

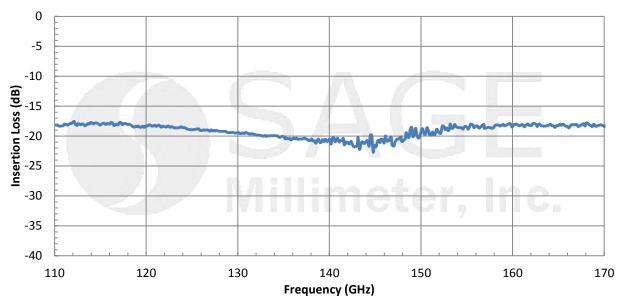
Parameter	Minimum	Typical	Maximum
RF Frequency Range	110 GHz		170 GHz
Insertion Loss @ 140 GHz		20.0 dB	
VSWR		1.2:1	1.3:1
Power Handling			300 mW
Specification Temperature		+25°C	
Operating Temperature	-40°C	a transport	+85°C

# **Mechanical Specifications:**

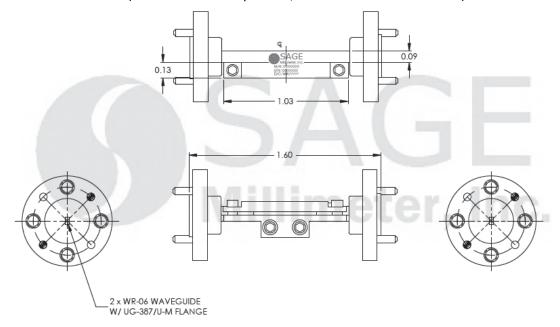
Specification
WR-06 Waveguide with UG-387/U-M Flange
WR-06 Waveguide with UG-387/U-M Flange
Fixed
1.60"
Gold Plated
0.8 Oz
TA-FD-L1

# D-Band Fixed Attenuator, 20 dB

### **Typical Insertion Loss vs. Frequency**



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



### Note:

- All data was presented using a limited sample lot. Actual data may vary unit to unit.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### Caution:

- RF power should never exceed 300 mW.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.



# D-Band Fixed Attenuator, 30 dB

### **Description:**

Model STA-30-06-F3 is a 30 dB fixed attenuator that is used in millimeterwave systems and operates from 110 to 170 GHz. The attenuator has a fixed attenuation value of 30 dB at center frequency, 140 GHz. While the attenuator is designed and fabricated for full waveguide band applications, the attenuation value of this model does show a minor slope within the band due to its distinct mechanical configuration. Various attenuation values are available under different model numbers.



### **Features:**

- Full Band Coverage
- Low Cost
- Accurate Attenuation Value at Center Frequency

## **Applications:**

- Test Lab
- Instrumentations
- System Integration

# **Electrical Specifications:**

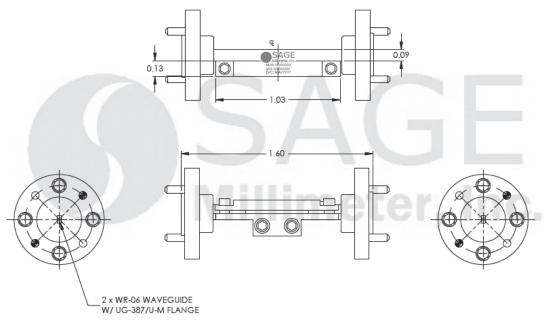
Parameter	Minimum	Typical	Maximum
RF Frequency Range	110 GHz		170 GHz
Insertion Loss @ 140 GHz		30.0 dB	
VSWR		1.2:1	1.3:1
Power Handling			300 mW
Specification Temperature		+25°C	
Operating Temperature	-40°C	a transport	+85°C

# **Mechanical Specifications:**

Specification
WR-06 Waveguide with UG-387/U-M Flange
WR-06 Waveguide with UG-387/U-M Flange
Fixed
1.60"
Gold Plated
0.8 Oz
TA-FD-L1

# D-Band Fixed Attenuator, 30 dB

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



### Note:

• SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

### **Caution:**

- RF power should never exceed 300 mW.
- Any foreign objects in the waveguide will cause performance degradation and may damage the device.

