NCA1

DC~2.5GHz, 0~16dB, 1W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	DC~2.5GHz
Attenuation Range:	10, 16dB
Impedance:	50Ω
Average Power:	1W

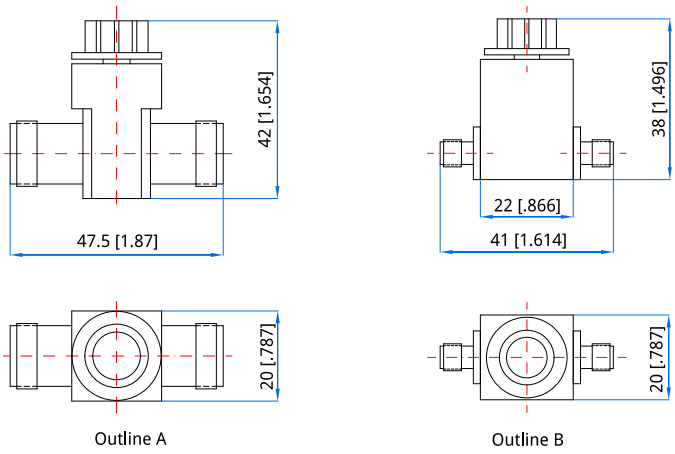
Mechanical

Weight:	65g
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum

Environmental

Temperature:	-40~+65℃

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA1-0-2.5-10-N - 0~10dB, N Female, Outline A
NCA1-0-2.5-16-N - 0~16dB, N Female, Outline A
NCA1-0-2.5-10-S - 0~10dB, SMA Female, Outline B
NCA1-0-2.5-16-S - 0~16dB, SMA Female, Outline B

Customization is available upon request.

Continuously Variable Attenuator

NA10-0.5-4-20

0.5~4GHz, 0~20dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.5~4GHz
VSWR:	1.6 max.
Attenuation Range:	0~20dB (1~4GHz)
Insertion Loss:	0.5dB max.
Impedance:	50Ω
Average Power:	10W

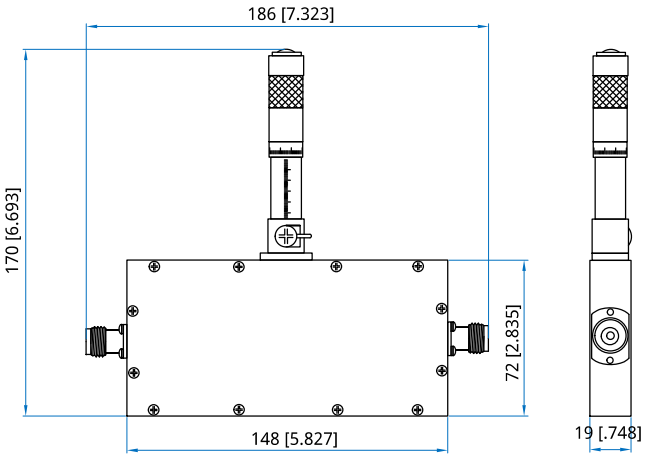
Mechanical

Size[*1]:	148*72*19mm
	5.827*2.835*0.748in
Weight:	590g
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum

Environmental

Temperature:	-40~+65℃

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA10-0.5-4-20

Customization is available upon request.

Continuously Variable Attenuator

NCA10-0.5-4-15

0.5~4GHz, 0~15dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.5~4GHz
VSWR:	1.5 max.
Attenuation Range:	15dB
Insertion Loss:	0.5dB max.
Impedance:	50Ω
Average Power:	10W

Mechanical

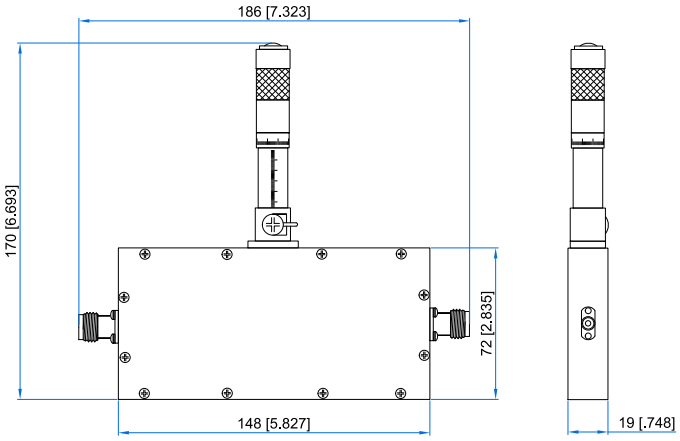
Size[*1]:	148*72*19mm 5.827*2.835*0.748in
Weight:	590g
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum

[1] Exclude connectors.

Environmental

Temperature:	-40~+65°C

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA10-0.5-4-15

Customization is available upon request.

Continuously Variable Attenuator

NCA10-2-18-40

2~18GHz, 0~40dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	2~18GHz
VSWR:	1.5 max.
Attenuation Range:	40dB
Insertion Loss:	0.4dB max.@2~4GHz
	0.5dB max.@4~8GHz
	0.8dB max.@8~12.4GHz
	1.2dB max.@12.4~18GHz
Impedance:	50Ω
Average Power:	10W

Mechanical

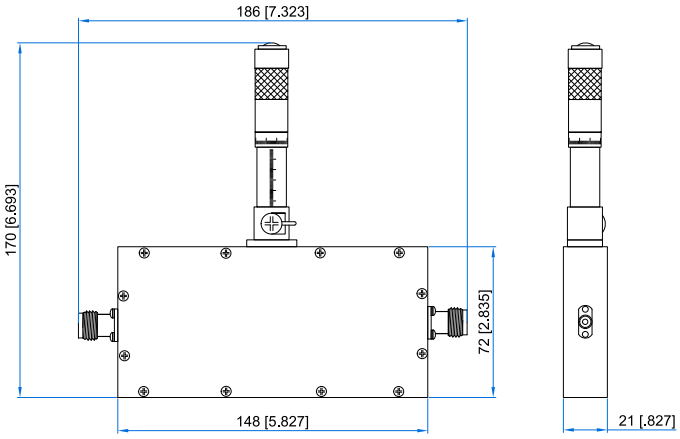
Size[*1]:	148*72*21mm
	5.827*2.835*0.827in
Weight:	600g
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum

[1] Exclude connectors.

Environmental

Temperature:	-40~+65℃

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA10-2-18-40

Customization is available upon request.

NCA50

0.9~4GHz, 0~10dB, 50W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.9~4GHz
Band Width:	100, 200MHz
Attenuation Accuracy:	±0.5dB
Attenuation Range:	0~10dB
Insertion Loss:	1.0dB max.
VSWR:	1.5dB max.
Impedance:	50Ω
Average Power:	50W

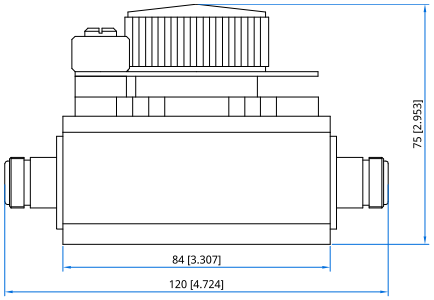
Mechanical

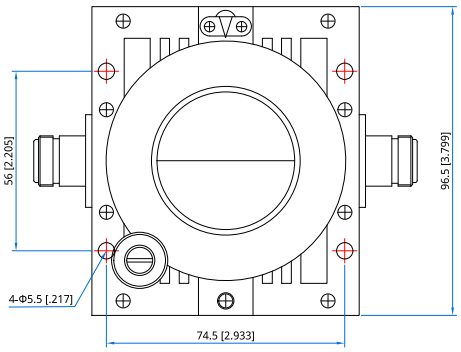
Size:	120*96.5*75mm 4.724*3.799*2.953in
Weight:	1.2Kg
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum
Mounting:	4-Φ5.5mm through-hole

Environmental

Temperature:	-40~+65℃

Outline Drawings





Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA50-X-Y-10

X: Start frequency in GHz
Y: Stop frequency in GHz

Examples:
To order an attenuator, 2-2.2GHz, N female, 0~10dB attenuation, specify NCA50-2-2.2-10.

Customization is available upon request.

Continuously Variable Attenuators

NCA75

0.9~4GHz, 0~15dB, 75W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.9~4GHz
Band Width:	100, 200MHz
Attenuation Accuracy:	±0.5dB
Attenuation Range:	10, 15dB
VSWR:	1.5 max.
Insertion Loss:	1.0dB max.
Impedance:	50Ω
Average Power:	75W

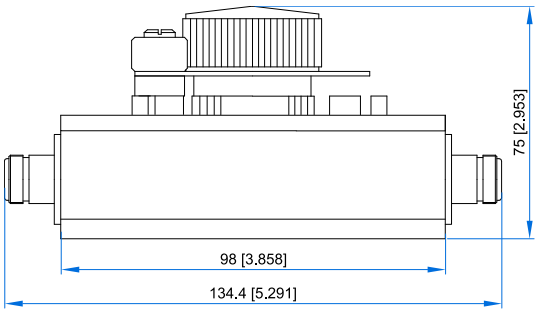
Mechanical

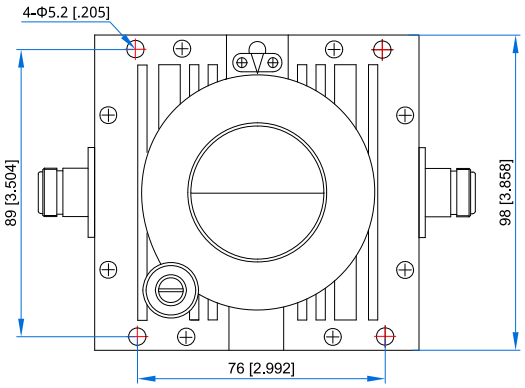
Size:	134.4*98*75mm 5.291*3.858*2.953in
Weight:	1.5Kg
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum
Mounting:	4-Φ5.2mm through-hole

Environmental

Temperature:	-40~+65℃

Outline Drawings





Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCA75-X-Y-Z

X: Start frequency in GHz
Y: Stop frequency in GHz
Z: Maximum attenuation in dB

Examples:

To order an attenuator, 2.9-3.1GHz, N female, 0~10dB attenuation, specify NCA75-2.9-3.1-10.

Customization is available upon request.

NCAK1

0.9~10.5GHz, 0~20dB, 100W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.9~10.5GHz
Band Width:	100, 200MHz
Attenuation Accuracy:	±0.5dB@0.9~4GHz
	±1.0dB@5~10.5GHz
Attenuation Range:	10, 12, 15, 20dB
VSWR:	1.5 max.@0.9~4GHz
	1.55 max.@5~6GHz
	1.6 max.@9.5~10.5GHz
Insertion Loss:	1.0dB max.@0.9~4GHz
	1.2dB max.@5~6GHz
	1.5dB max.@9.5~10.5GHz
Impedance:	50Ω
Average Power:	100W

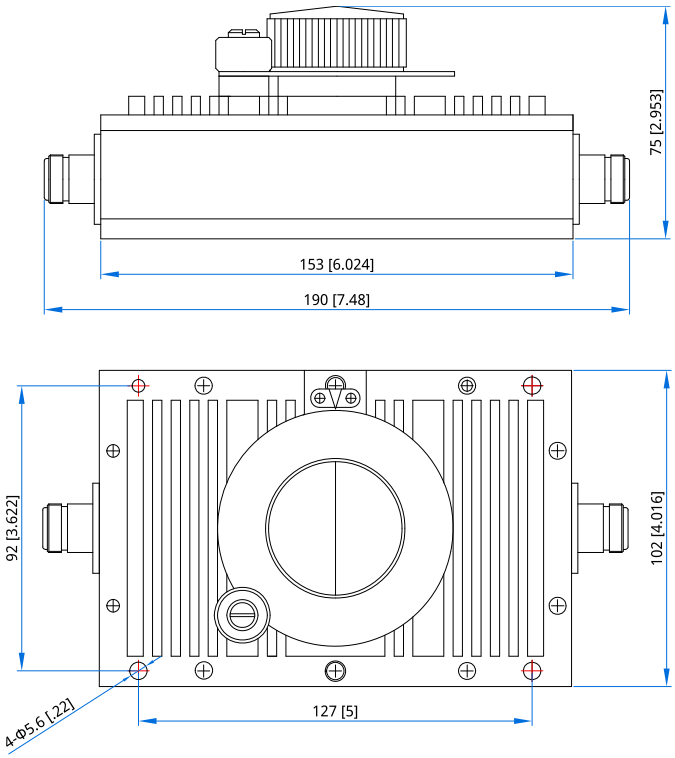
Mechanical

Size:	190*102*75mm
	7.48*4.016*2.953in
Weight:	2Kg
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum
Mounting:	4-Φ5.6mm through-hole

Environmental

Temperature:	-40~+65℃

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCAK1-X-Y-Z

X: Start frequency in GHz
Y: Stop frequency in GHz
Z: Maximum attenuation in dB

Examples:

To order an attenuator, 2.5-2.7GHz, N female, 0~20dB attenuation, specify NCAK1-2.5-2.7-20.

Customization is available upon request.

NCAK3

0.9~10.5GHz, 0~25dB, 300W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	0.9~10.5GHz
Band Width:	100, 200MHz
Attenuation Accuracy:	±0.5dB@0.9~4GHz
	±1.0dB@5~10.5GHz
Attenuation Range:	10, 12, 15, 25dB
VSWR:	1.5 max.@0.9~4GHz
	1.55 max.@5~6GHz
	1.6 max.@9.5~10.5GHz
Insertion Loss:	1.0dB max.@0.9~4GHz
	1.2dB max.@5~6GHz
	1.5dB max.@9.5~10.5GHz
Impedance:	50Ω
Average Power:	300W

Mechanical

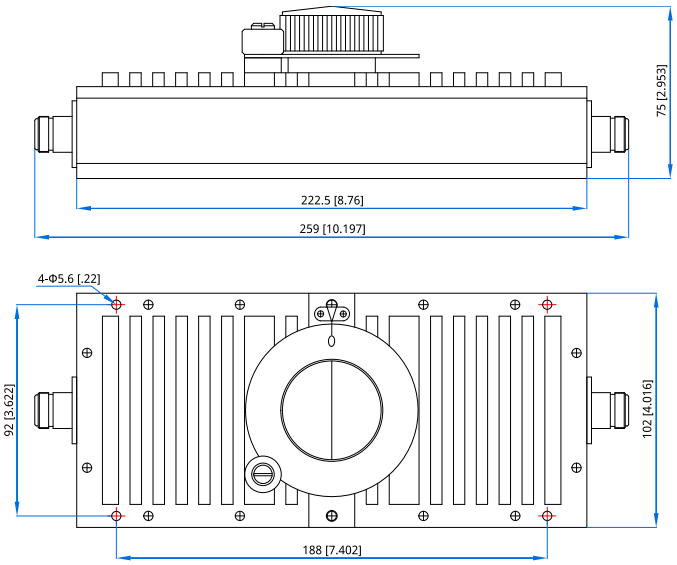
Size[*1]:	259*102*75mm
	10.197*4.016*2.953in
Weight:	2.6Kg
RF Connectors:	N Female
Outer Conductor:	Nickel plated brass
Female Inner Conductor:	Gold plated beryllium copper
Housing:	Aluminum
Mounting:	4-Φ5.6mm through-hole

[1] Exclude connectors.

Environmental

Temperature:	-40~+65℃

Outline Drawings



Unit: mm [in]
Tolerance: ±1mm [±0.04in]

How To Order

NCAK3-X-Y-Z

X: Start frequency in GHz
Y: Stop frequency in GHz
Z: Maximum attenuation in dB

Examples:
To order an attenuator, 2.5-2.7GHz,N female, 0~25dBattenuation, specify NCAK3-2.5-2.7-25.

Customization is available upon request.

NSA06A

DC~6GHz, 0~90dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA06A series Rotary Stepped Attenuators cover frequency range DC~6GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~2.5	0~1/0.1	1.25	0.5	0.2	2, 10	SMA, N
DC~3		1.3	0.5	0.2		
DC~4.3		1.35	0.75	0.3		
DC~6		1.4	1	0.3		
DC~2.5	0~10/1	1.25	0.4	0.4	2, 10	SMA, N
DC~3		1.3	0.5	0.5		
DC~4.3		1.35	0.75	0.5		
DC~6		1.4	1	0.5		
DC~2.5	0~60/10	1.25	0.4	0.5	2, 10	SMA, N
DC~3		1.3	0.5	0.5 (1~50dB), 0.8 or ±3% (50~60dB)		
DC~4.3		1.35	0.75			
DC~6		1.4	1			
DC~2.5	0~90/10	1.25	0.4	0.5 (1~50dB), ±3% (50~90dB)	2, 10	SMA, N
DC~3		1.3	0.5	0.5 (1~50dB), ±3.5% (50~90dB)		

Electrical

Impedance:	50Ω
Peak Powr[*1]:	100W

[1] Pulse width: 5us, duty cycle: 2%.

Mechanical

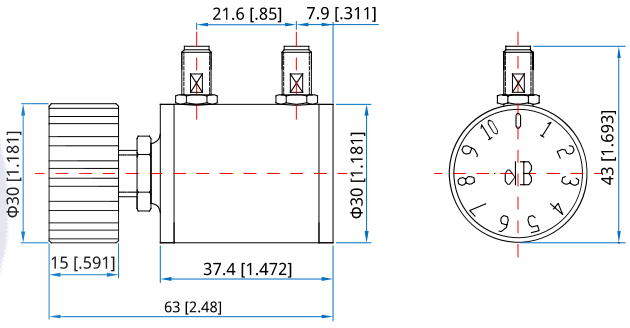
Size[*2]:	Φ30*63mm
	Φ1.181*2.48in
Weight:	250g
RF Connectors:	SMA Female, N Female
Housing Materials:	Aluminum

[2] Exclude connectors.

Environmental

Temperature:	-20~+85℃

Outline Drawings



Unit: mm [inch]
Tolerance: ±1mm [±0.04in]

NSA06A-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
N - N Female
S - SMA Female

Examples:
To order an attenuator, DC~6GHz, 0~60dB attenuation, 2W, SMA female, specify NSA06A-6-60-2-S.

Customization is available upon request.

NSA06B

DC~6GHz, 0~100dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA06B series Rotary Stepped Attenuators cover frequency range DC~6GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.) SMA	VSWR (Max.) N	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)
DC~2.5	0~11/0.1	1.3	1.45	1	0.2 (1dB), 0.4(2~11dB)	2, 10
DC~3		1.35	1.45	1.2		
DC~4.3		1.4	1.55	1.5	0.3 (1dB), 0.5(2~11dB)	
DC~6		1.55	1.6	1.8		
DC~2.5	0~50/1	1.3	1.35	1	0.5 (1~10dB), 0.8 or 3% (50~60dB)	2, 10
DC~2.5	0~70/1	1.3	1.45	1	0.5 (1~10dB), 0.8 or 3% (11~59dB), 1.5 or 3% (60~70dB)	2, 10
DC~3		1.35	1.45	1.2		
DC~4.3		1.4	1.55	1.5		
DC~6		1.55	1.6	1.8		
DC~2.5	0~100/1	1.3	1.45	1	0.5 (1~10dB), 0.8 or 3% (11~59dB), 1.5 or 3% (60~69dB), ±3.5% (70~100dB)	2, 10
DC~3		1.35	1.45	1.2		

Electrical

Impedance: 50Ω
Peak Powr[*1]: 100W

[1] Pulse width: 5us, duty cycle: 2%.

Mechanical

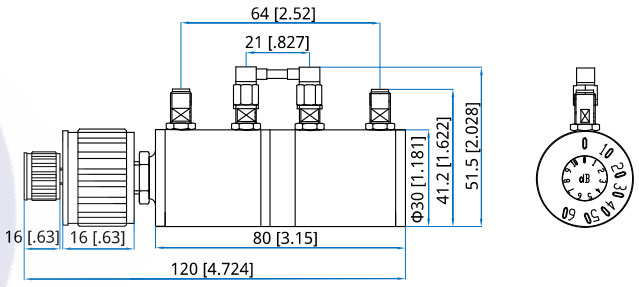
Size[*2]: Φ30*120mm
Φ1.181*4.724in
Weight: 435g
RF Connectors: SMA Female, N Female
Housing Materials: Aluminum

[2] Exclude connectors.

Environmental

Temperature: -20~+85℃

Outline Drawings



Unit: mm [inch]
Tolerance: ±1mm [±0.04in]

NSA06B-W-X-Y-Z

W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
N - N Female
S - SMA Female

Examples:
To order an attenuator, DC~4.3GHz, 0~70dB attenuation, 2W, SMA female, specify NSA06B-4.3-70-2-S.

Customization is available upon request.

NSA06C

DC~6GHz, 0~100dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA06C series Rotary Stepped Attenuators cover frequency range DC~6GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~2.5	0~11/0.1	1.4	1.2	0.3 (1dB), 0.5 (2~11dB)	2, 10	N
DC~3		1.45	1.2			
DC~4.3		1.5	1.5			
DC~6		1.65	1.8			
DC~2.5	0~70/1	1.4	1.2	0.8 or 3% (0~60dB), 1.5 or 3% (61~70dB)	2, 10	N
DC~3		1.45	1.2			
DC~4.3		1.5	1.5			
DC~6		1.65	1.8			
DC~2.5	0~100/1	1.4	1.2	0.8 or 3% (0~59dB), 1.5 or 3% (60~69dB), ±3.5% (70~100dB)	2, 10	N
DC~3		1.45	1.2			

Electrical

Impedance:	50Ω
Peak Powr*[1]:	100W

[1] Pulse width: 5us, duty cycle: 2%.

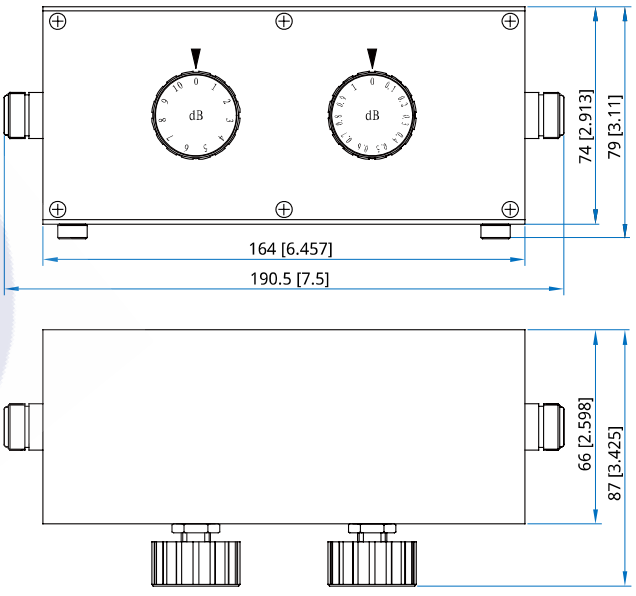
Mechanical

Size:	190.5*87*79mm 7.5*3.425*3.11in
Weight:	1Kg
RF Connectors:	N Female
Housing Materials:	Aluminum

Environmental

Temperature:	-20~+85℃

Outline Drawings



Unit: mm [inch] Tolerance: ±1mm [±0.04in]

NSA06C-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
N - N Female

Examples:
To order an attenuator, DC~4.3GHz, 0~70dB attenuation, 2W, N female, specify NSA06C-4.3-70-2-N.

Customization is available upon request.

NSA06D

DC~6GHz, 0~101dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA06D series Rotary Stepped Attenuators cover frequency range DC~6GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~2.5	0~71/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (71dB)	2, 10	N
DC~3		1.6	1.7			
DC~4.3		1.7	2			
DC~6		1.75	2.5			
DC~2.5	0~101/0.1	1.5	1.5	0.3 (0.1~1dB), 0.4 (1~10dB), 0.8 (10~60dB), 1.5 (61~70dB), ±3.5% (70~101dB)	2, 10	N
DC~3		1.6	1.7			

Electrical

Impedance:	50Ω
Peak Powr*[1]:	100W

[1] Pulse width: 5us, duty cycle: 2%.

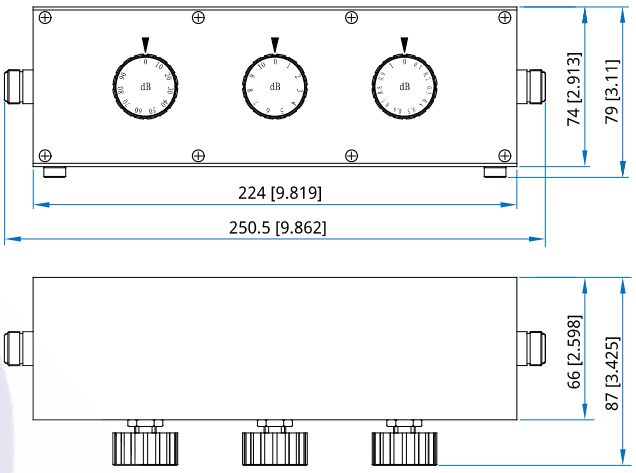
Mechanical

Size:	250.5*87*79mm
	9.862*3.425*3.11in
Weight:	1.25Kg
RF Connectors:	N Female
Housing Materials:	Aluminum

Environmental

Temperature:	-20~+85℃

Outline Drawings



Unit: mm [inch]
Tolerance: ±1mm [±0.04in]

NSA06D-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
N - N Female

Examples:
To order an attenuator, DC~4.3GHz, 0~71dB attenuation, 2W, N female, specify NSA06D-4.3-71-2-N.

Customization is available upon request.

NSA18A

DC~18GHz, 0~90dB, 25W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

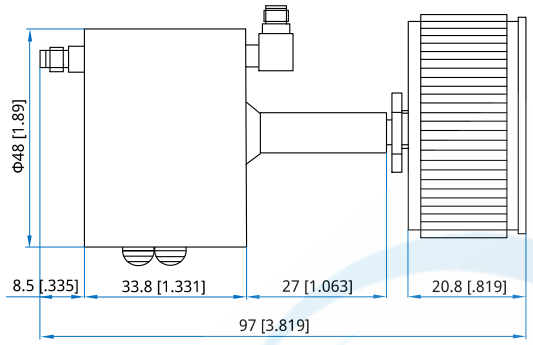
Description

NSA18A series Rotary Stepped Attenuators cover frequency range DC~18GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

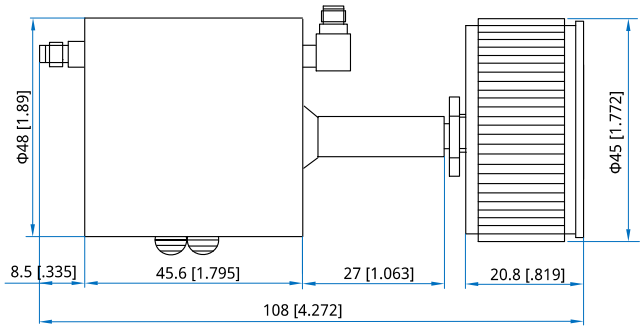
Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~8	0~9/1	1.4	0.8	0.6	2, 10	SMA
DC~12.4		1.5	1	0.8		
DC~18		1.6	1.2	1		
DC~8	0~90/10	1.4	1	1.5 (0~60dB), 2.5 or 3.5% (70~90dB)	2, 10	SMA
DC~12.4		1.5	1.2			
DC~18		1.6	1.5			
DC~18	0~70/10	1.65	1	1.5 or 4%	25	SMA

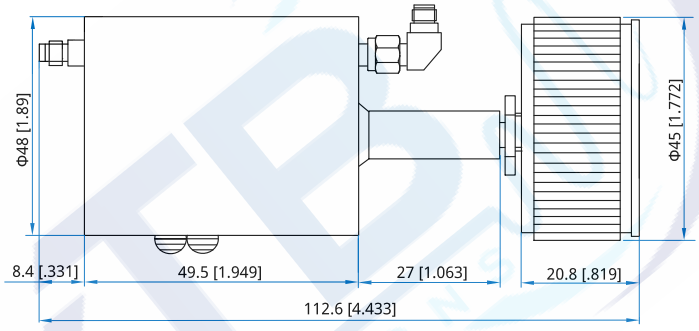
Outline Drawings



Outline A



Outline B



Outline C

Unit: mm [inch] Tolerance: ±1mm [±0.04in]

Impedance:	50Ω
Peak Powr*[1]:	200W

[1] Pulse width: 5us, duty cycle: 1%.

Mechanical

Weight:	280g max.
RF Connectors:	SMA Female
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54℃

How To Order

NSA18A-W-X-Y-Z

W: Stop Frequency in GHz
X: Maximum attenuation in dB (Outline A - 2W 0~9dB, Outline B - 2W 0~90dB/10W, Outline C - 25W)
Y: Power in Watts
Z: Connector type

Connector naming rules:
S - SMA Female

Examples:
To order an attenuator, DC~8GHz, 0~9dB attenuation, 2W, SMA female, specify NSA18A-8-9-2-S.

Customization is available upon request.

NSA18B

DC~18GHz, 0~99dB, 5W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA18B series Rotary Stepped Attenuators cover frequency range DC~18GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~8	0~69/1	1.5	1	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 5	SMA
DC~12.4		1.6	1.25			
DC~18		1.75	1.5			
0.1~8	0~99/1	1.5	1	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 or 3.5% (70~99dB)	2, 5	SMA
0.1~12.4		1.6	1.25			
0.1~18		1.75	1.5			

Electrical

Impedance:	50Ω
Peak Powr*[1]:	200W

[1] Pulse width: 5us, duty cycle: 0.5%.

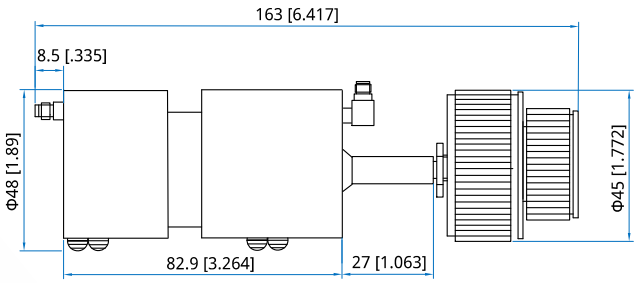
Mechanical

Size:	Φ48*163mm
	Φ1.89*6.417in
Weight:	480g
RF Connectors:	SMA Female
Outer Conductor:	Stainless Steel
Inner Conductor:	Gold Plated Beryllium Copper
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54°C

Outline Drawings



Unit: mm [inch]
Tolerance: ±1mm [±0.04in]

NSA18B-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
S - SMA Female

Examples:
To order an attenuator, DC~12.4GHz, 0~69dB attenuation, 2W, SMA female, specify NSA18B-12.4-69-2-S.

Customization is available upon request.

NSA18C

DC~18GHz, 0~99.9dB, 2W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA18C series Rotary Stepped Attenuators cover frequency range DC~18GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~8	0~99.9/0.1	1.5	1.3	0.5 (0.1~0.9dB@DC~8GHz), 0.8 (1~9.9dB@DC~8GHz), 1 (1~9.9dB@8~18GHz), 1.5 (10~19dB), 2 (20~49dB), 2 .5 (50~69dB), 3 or 3.5% (70~99dB)	2	N, SMA, 3.5mm
DC~12.4		1.65	1.6			
DC~18		2	1.7			

Electrical

Impedance:	50Ω
Peak Powr*1:	200W

[1] Pulse width: 5us, duty cycle: 0.5%.

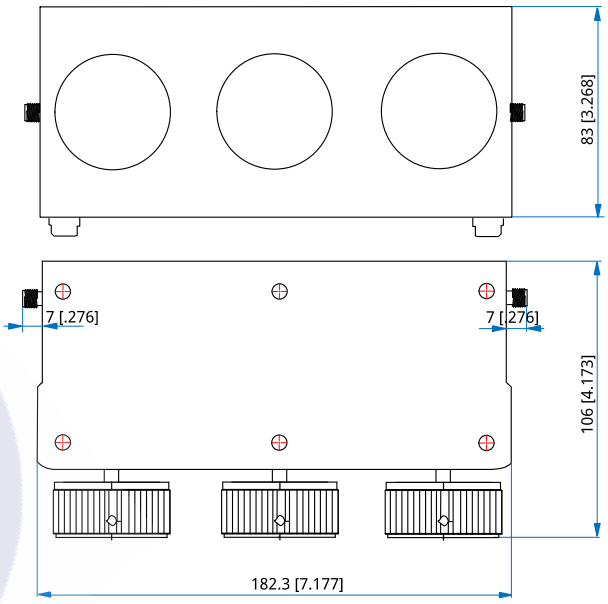
Mechanical

RF Connectors:	N Male & Female SMA Female 3.5mm Female
Housing Materials:	Aluminum, anodised
Male Inner Conductor:	Gold plated brass
Female Inner Conductor:	Gold plated beryllium brass
Connectors:	Nickel plated brass

Environmental

Temperature:	0~+54℃

Outline Drawings



Outline A

Unit: mm [in]
Tolerance: ±1mm [±0.04in]

NSA18C-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
S - SMA Female (Outline A)
3 - 3.5mm female (Outline A)

Examples:99.9dB attenuation, 2W, SMA female, specify NSA18C-18-99.9-2-S.
Customization is available upon request.

NSA26

DC~26.5GHz, 0~90dB, 10W

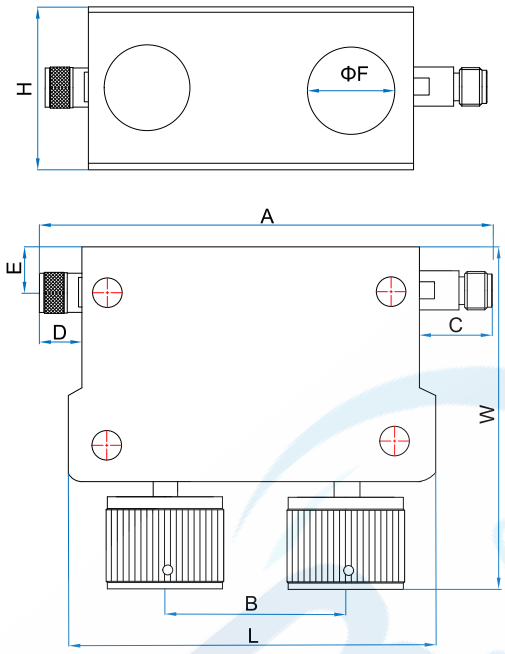
Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Electrical

Frequency:	DC~26.5GHz
Attenuation Range:	0~69dB, 0~99dB
Step:	1dB
Insertion Loss:	2dB max.
VSWR:	1.85 max.
Impedance:	50Ω
Average Power:	2, 10W@25°C max.

Outline Drawings



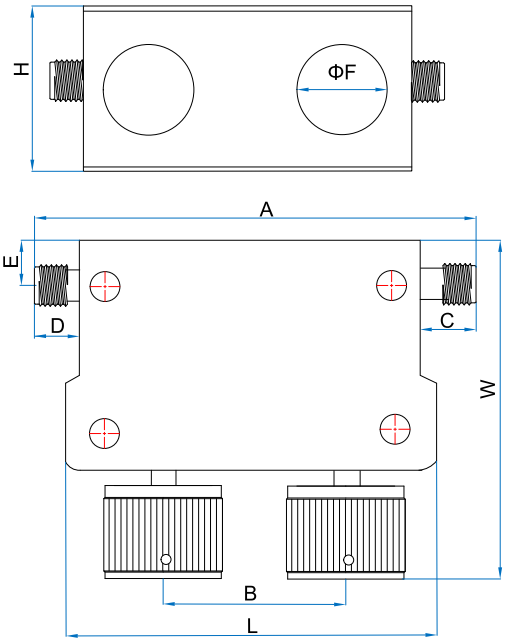
Outline A

2W

Size	L	W	H	A	B	C	D	E	F
mm	115	106	83	163	57.4	27	24	14	45
in	4.528	4.173	3.268	6.417	1.063	0.945	0.000	0.551	1.772

10W

Size	L	W	H	A	B	C	D	E	F
mm	126	106	83	174	74.1	27	24	14	45
in	4.961	4.173	3.268	6.850	2.917	1.063	0.945	0.551	1.772



Outline B

2W

Size	L	W	H	A	B	C	D	E	F
mm	115	106	83	126	57.4	7	7	14	45
in	4.528	4.173	3.268	4.961	2.260	0.276	0.276	0.551	1.772

10W

Size	L	W	H	A	B	C	D	E	F
mm	126	106	83	137	74.1	77	7	14	45
in	4.961	4.173	3.268	5.394	2.917	3.031	0.276	0.551	1.772

Unit: mm [in]
Tolerance: ±1mm [±0.04in]

Mechanical

RF Connectors:	N Male & Female
	SMA Female
	3.5mm Female
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54℃

Attenuation Accuracy vs. Attenuation

Attenuation (dB)	Attenuation Accuracy (±dB)	
	DC~18GHz	DC~26.5GHz
0~9	0.8	1.5
10~19	1	1.75
20~49	1.5	2
50~69	2	2.5
70~99	3.5	-

How To Order

NSA26-W-X-Y-Z

W: Frequency in GHz
X: Maxinum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
N - N male & female
S - SMA female
3 - 3.5mm female

Examples:
To order an attenuator, DC-26.5GHz, 0~69dB attenuation, 2W, SMA female, specify NSA26-26.5-69-2-S.

NSA26A

DC~26.5GHz, 0~99dB, 10W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA26A series Rotary Stepped Attenuators cover frequency range DC~26.5GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~8	0~69/1	1.5	1.25	0.5 (0~9dB@DC~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB)	2, 10	N, SMA, 3.5mm
DC~12.4		1.6	1.5			
DC~18		1.75	1.75			
DC ~ 26.5		1.85	2	1.5 (0~9dB), 1.75 (10~19dB), 2 (20~49dB), 2.5 (50~69dB)	2	3.5mm
DC~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 or 3.5% (70~99dB)	2	N, SMA, 3.5mm
DC~12.4		1.5	1.5			
DC~18		1.75	1.5			
0.1~8	0~99/1	1.5	1.25	0.5 (0~9dB@0.1~8GHz), 0.8 (0~9dB@8~18GHz), 1 (10~19dB), 1.5 (20~49dB), 2 (50~69dB), 2.5 or 3.5% (70~99dB)	10	N, SMA, 3.5mm
0.1~12.4		1.6	1.5			
0.1~18		1.75	1.75			

Electrical

Impedance:	50Ω
Peak Powr*[1]:	200W

[1] Pulse width: 5us, duty cycle: 0.5%.

Mechanical

RF Connectors:	N Male & Female SMA Female 3.5mm Female
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54℃

How To Order

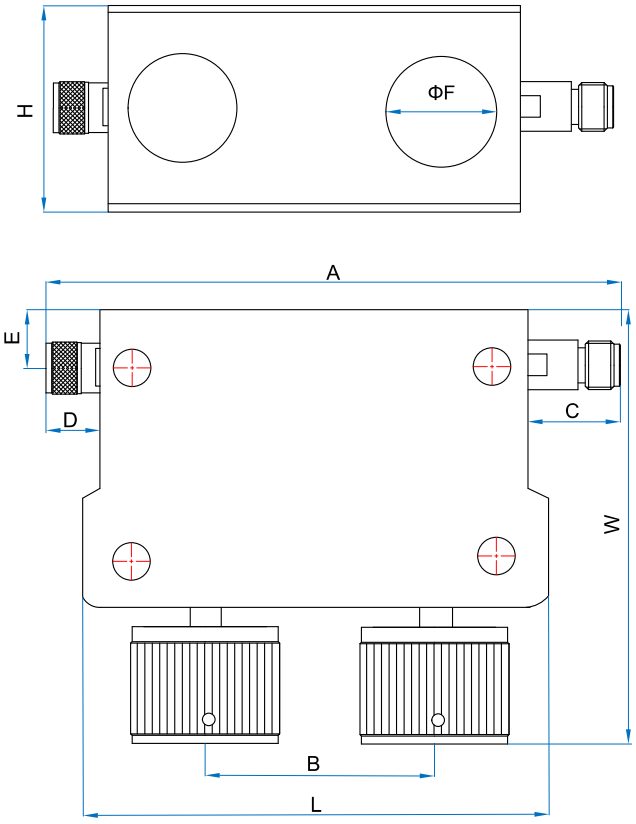
NSA26A-W-X-Y-Z

W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

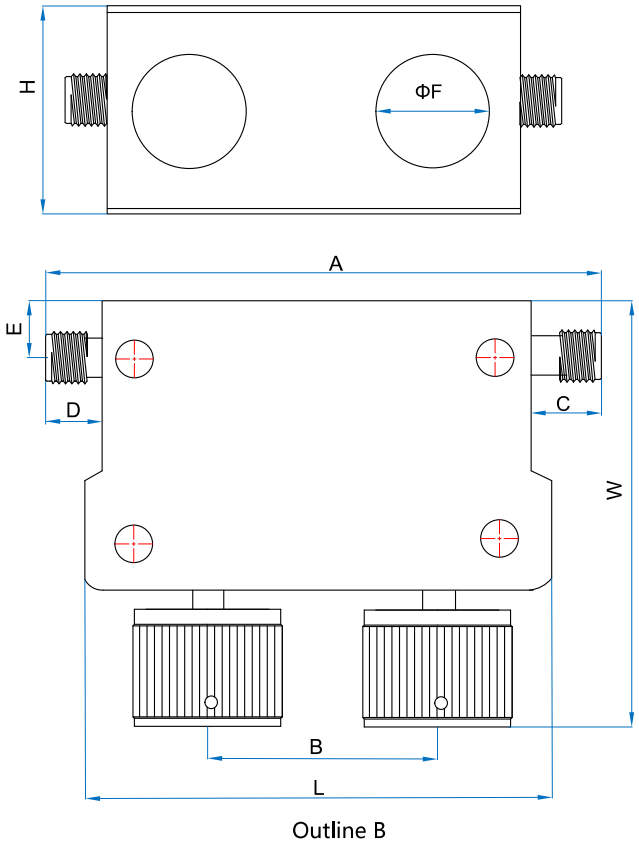
Connector naming rules:
S - SMA Female (Outline B)
N - N male & female (Outline A)
3 - 3.5mm female (Outline B)

Examples:
To order an attenuator, DC~26.5GHz, 0~69dB attenuation, 2W, SMA female, specify NSA26A-26.5-69-2-S.
Customization is available upon request.

Rotary Stepped Attenuators



Outline A



Outline B

2W

Size	L	W	H	A	B	C	D	E	F
mm	115	106	83	163	57.4	27	24	14	45
in	4.528	4.173	3.268	6.417	2.260	1.063	0.945	0.551	1.772

10W

Size	L	W	H	A	B	C	D	E	F
mm	126	106	83	174	74.1	27	24	14	45
in	4.961	4.173	3.268	6.850	2.917	1.063	0.945	0.551	1.772

2W

Size	L	W	H	A	B	C	D	E	F
mm	115	106	83	126	57.4	7	7	14	45
in	4.528	4.173	3.268	4.961	2.260	0.276	0.276	0.551	1.772

10W

Size	L	W	H	A	B	C	D	E	F
mm	126	106	83	137	74.1	7	7	14	45
in	4.961	4.173	3.268	5.394	2.917	0.276	0.276	0.551	1.772

Unit: mm [in]
Tolerance: ±1mm [±0.04in]

NSA26B

DC~26.5GHz, 0~60dB, 25W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA26B series Rotary Stepped Attenuators cover frequency range DC~26.5GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~26.5	0~60/10	1.8	1.8	1.5 or 4%	25	SMA

Electrical

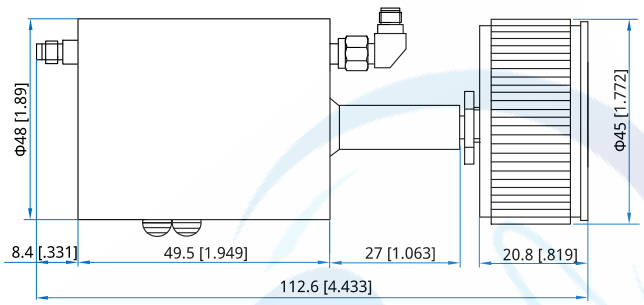
Impedance:	50Ω
Peak Powr*1:	200W

[1] Pulse width: 5us, duty cycle: 1%.

Mechanical

Weight:	300g max.
RF Connectors:	SMA Female
Housing Materials:	Aluminum

Outline Drawings



Unit: mm [inch]
Tolerance: ±1mm [±0.04in]

Environmental

Temperature:	0~+54℃

How To Order

NSA26B-W-X-Y-Z
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
S - SMA Female

Examples:
To order an attenuator, DC~26.5GHz, 0~60dB attenuation, 25W, SMA female, specify NSA26B-26.5-60-25-S.

Customization is available upon request.

NSA28

DC~28GHz, 0~90dB, 25W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA28 series Rotary Stepped Attenuators cover frequency range DC~28GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~18	0~9/1	1.6	1	0.8	2, 10	SMA, 3.5mm
DC~26.5		1.7	1.8	1		
DC~28		1.75	1.8	1.5	10	
DC~18	0~70/10	1.6	1	1.5 or 4%	2,10	SMA, 3.5mm
DC~26.5	0~60/10	1.75	1.8	1.5 or 4%	2, 10	SMA, 3.5mm
0.1~8 0.1~12.4 0.1~18	0~90/10	1.6	1	1.5 or 4%	2, 10	SMA, 3.5mm
DC~18	0~70/10	1.6	1	1.5 or 4%	25	SMA, 3.5mm
DC~26.5		1.75	1.8	1.5 or 4%		
DC~28		1.75	1.8	2 or 5%		

Electrical

Impedance:	50Ω
Peak Powr*1:	200W

[1] Pulse width: 5us, duty cycle: 1%.

Mechanical

Size:	106*62/66*83mm 4.173*2.441/2.598*3.268in
Weight:	525g
RF Connectors:	3.5mm Female, SMA Female
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54°C

How To Order

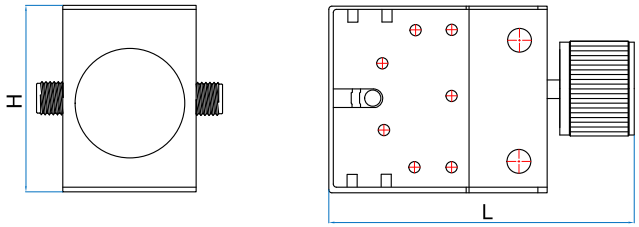
NSA28-W-X-Y-Z

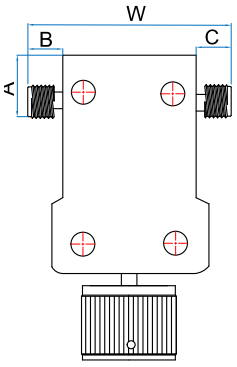
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
S - SMA Female
3 - 3.5mm female

Examples:
To order an attenuator, DC~28GHz, 0~70dB attenuation, 2W, 3.5mm female, specify NSA28-28-70-2-3.

Customization is available upon request.





2W:60-90dB, 10W:1-90dB						
Size	L	W	H	A	B	C
mm	106	62	83	14	7	7
in	4.173	2.441	3.268	0.551	0.276	0.276
2W:1-9dB						
Size	L	W	H	A	B	C
mm	106	66	83	14	10.5	7
in	4.173	2.598	3.268	0.551	0.413	0.276
25W:70dB						
Size	L	W	H	A	B	C
mm	106	66	83	-	-	-
in	4.173	2.598	3.268	-	-	-

Unit: mm [in]
Tolerance: ±1mm [±0.04in]

NSA40

DC~40GHz, 0~9dB, 2W

Features:
* Low VSWR
* High Attenuation Flatness

Applications:
* Wireless
* Transmitter
* Laboratory Test
* Radar

Description

NSA40 series Rotary Stepped Attenuators cover frequency range DC~40GHz. Rotary stepped attenuators can adjust the power level of microwave circuit in a certain frequency range by step.

Specifications

Frequency (GHz)	Attenuation Range/Step (dB)	VSWR (Max.)	IL (dB Max.)	Attenuation Accuracy (±dB)	Avg Power (W)	Connectors
DC~32	0~9/1	1.8	2	1.2	2	2.92mm,
DC~40		1.9	2.2	1.5		3.5mm

Electrical

Impedance:	50Ω
Peak Power[*1]:	200W

[1] Pulse width: 5us, duty cycle: 2%.

Mechanical

Size:	106*62/66*83mm
	4.173*2.441/2.598*3.268in
Weight:	520g
Housing Materials:	Aluminum

Environmental

Temperature:	0~+54℃

How To Order

NSA40-W-X-Y-Z

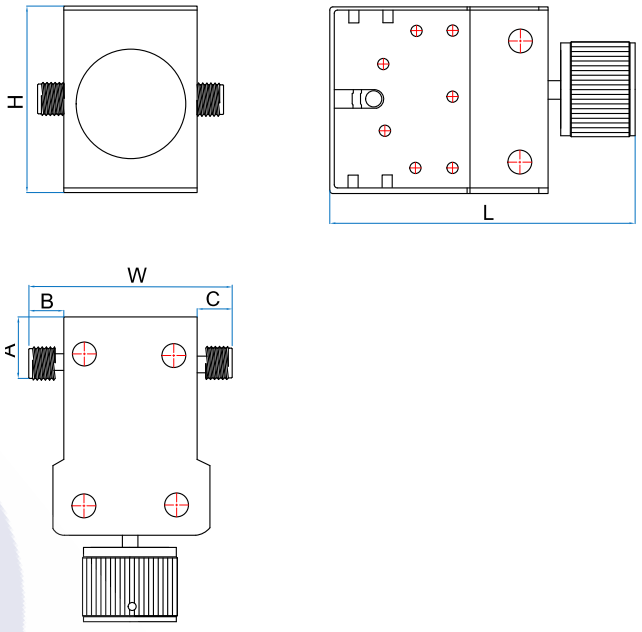
W: Stop Frequency in GHz
X: Maximum attenuation in dB
Y: Power in Watts
Z: Connector type

Connector naming rules:
K - 2.92mm Female
3 - 3.5mm female

Examples:
To order an attenuator, DC~40GHz, 0~9dB attenuation, 2W, 2.92mm female, specify NSA40-40-9-2-K.

Customization is available upon request.

Outline Drawings



Size	L	W	H	A	B	C
mm	106	66	83	14	10.5	7
in	4.173	2.598	3.268	0.551	0.413	0.276

Unit: mm [in]
Tolerance: ±1mm [±0.04in]