

FFA1820

DC~18GHz, 20W

Features:

- * Low VSWR
- * High Attenuation Flatness

Applications:

- * Wireless
- * Transmitter
- * Laboratory Test
- * Radar

Electrical

Frequency:	DC~18GHz
Attenuation:	1~60dB
Impedance:	50Ω
Average Power*1:	20W@25°C max.

[1] Derated linearly to 1W@120°C.

Mechanical

RF Connectors*2: SMA, N

[2] Female connectors can be replaced with male connectors on request.

Environmental

Temperature: -55~+125°C

Peak Power

Peak Power (W)	Pulse Width (μS)	Duty Cycle (%)	Applicable Scope
500	5	2	@SMA, DC~18GHz
5000		1	@N, DC~12.4GHz
1000		1	@N, 18GHz

Length (mm/in)

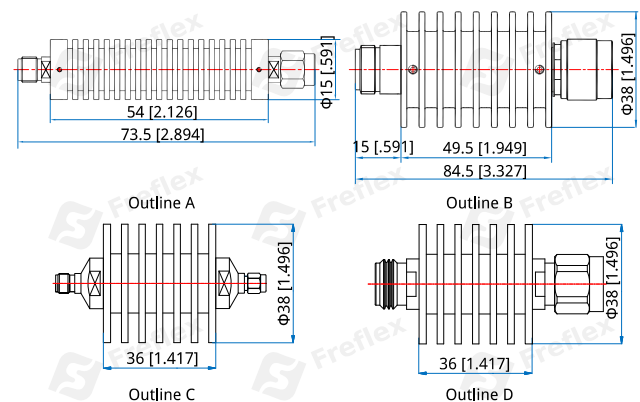
Attenuation (dB)	N
1~10, 15, 20, 30@DC~18GHz	36 [1.417]
40, 50@DC~12.4GHz	36 [1.417]
40@18GHz	49.5 [1.949]

Length (mm/in)

Attenuation (dB)	SMA
1~10, 15, 20, 30	36 [1.417]
40, 50, 60	54 [2.126]

Attenuation Accuracy and VSWR (SMA)

Frequency (GHz)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR (max.)
	1~10	11~20	21~30	40	50	60	
DC~4	0.4	0.5	0.6	0.7	0.8	0.9	1.2
DC~8	0.5	0.6	0.8	0.8	0.8	1.0	1.25
DC~12.4	0.6	0.7	0.8	0.9	1.0	1.2	1.3
DC~18	0.6	0.8	1.0	1.2	1.3	1.5	1.35

Outline Drawings


Unit: mm [in]

Tolerance: ±2mm [±0.08in]

How To Order
FFA1820-X-Y-Z

X: Frequency in GHz

Y: Attenuation in dB

Z: Connector type

Connector naming rules:

S - SMA (Outline A, Outline C)

N - N (Outline B, D)

Examples:

To order an attenuator, DC-18GHz, N male to N female, 3dB attenuation, specify FFA1820-18-3-N.

Attenuation Accuracy and VSWR (N)

Frequency (GHz)	Attenuation Accuracy (\pm dB) vs. Attenuation (dB)					VSWR (max.)
	1~10	11~20	21~30	40	50	
DC~4	0.4	0.5	0.6	0.7	0.8	1.2
DC~8	0.5	0.6	0.8	0.8	0.8	1.25
DC~12.4	0.6	0.7	0.8	0.9	1.35	1.35
DC~18	0.6	0.8	1.0	1.2	/	1.45

Typical Performance Curves

N

