

# QFA1820

## 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<sup>\*1</sup>: 20W@25°C max.

[1] Derated linearly to 1W@120°C.

### Mechanical

RF Connectors<sup>\*2</sup>: SMA, N

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

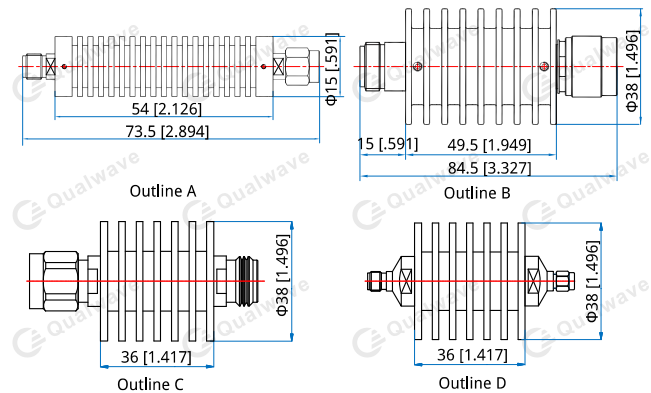
### Environmental

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

### Outline Drawings



Unit: mm [in]  
 Tolerance: ±2mm [±0.08in]

### Attenuation Accuracy and VSWR (SMA)

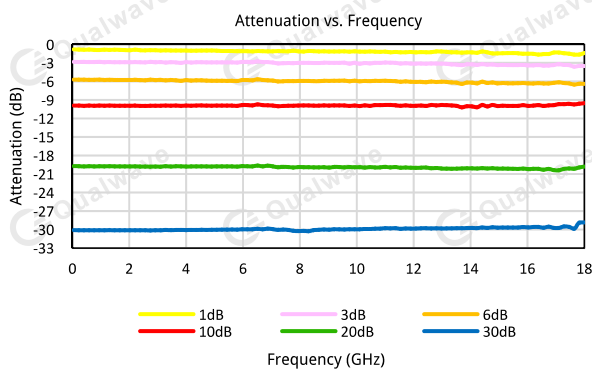
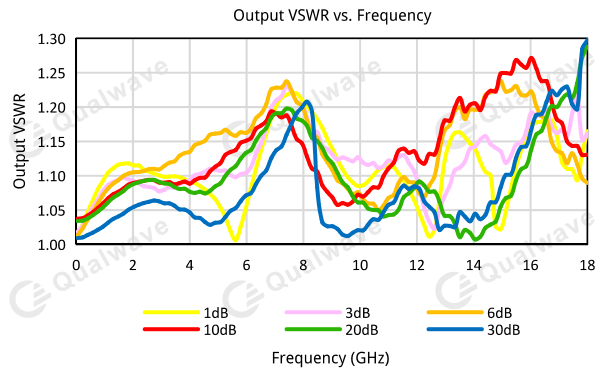
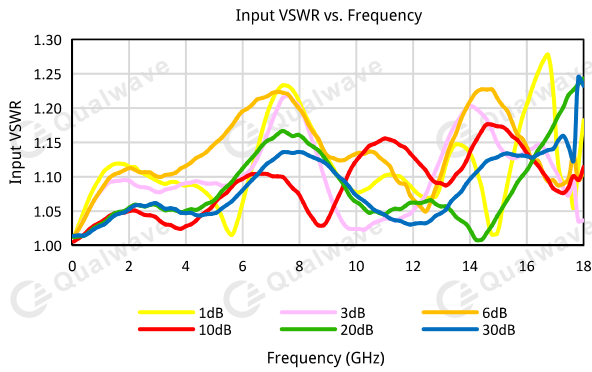
Frequency (GHz)	Attenuation Accuracy (±dB) vs. Attenuation (dB)						VSWR (max.)
	1~10	11~20	21~30	31~40	41~50	51~60	
DC~4	0.4	0.5	0.6	0.7	0.8	0.9	1.2
DC~8	0.5	0.6	0.8	0.8	0.8	1.0	1.25
DC~12.4	0.6	0.7	0.8	0.9	1.0	1.2	1.3
DC~18	0.6	0.8	1.0	1.2	1.3	1.5	1.35

### Attenuation Accuracy and VSWR (N)

Frequency (GHz)	Attenuation Accuracy (±dB) vs. Attenuation (dB)				VSWR (max.)
	1~10	11~20	21~30	31~40	
DC~4	0.4	0.5	0.6	0.7	1.2
DC~8	0.5	0.6	0.8	0.8	1.25
DC~12.4	0.6	0.7	0.8	0.9	1.35
DC~18	0.6	0.8	1.0	1.2	1.45

## Typical Performance Curves

N



## How To Order

### QFA1820-X-Y-Z

X: Frequency in GHz

Y: Attenuation in dB

Z: Connector type

Connector naming rules:

S - SMA (Outline D: 1 ~ 30dB, Outline A: 31 ~ 60dB)

N - N (Outline C: 1 ~ 30dB, Outline B: 31 ~ 40dB)

Examples:

To order an attenuator, DC-18GHz, N male to N female, 3dB attenuation, specify QFA1820-18-3-N.