

# QFA1850

## DC~18GHz, 50W

Features:  
 \* Low VSWR  
 \* High Attenuation Flatness

Applications:  
 \* Wireless  
 \* Transmitter  
 \* Laboratory Test  
 \* Radar



### Electrical

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

[1] Derated linearly to 2.5W@120°C.

### Mechanical

RF Connectors\*2: SMA, N

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

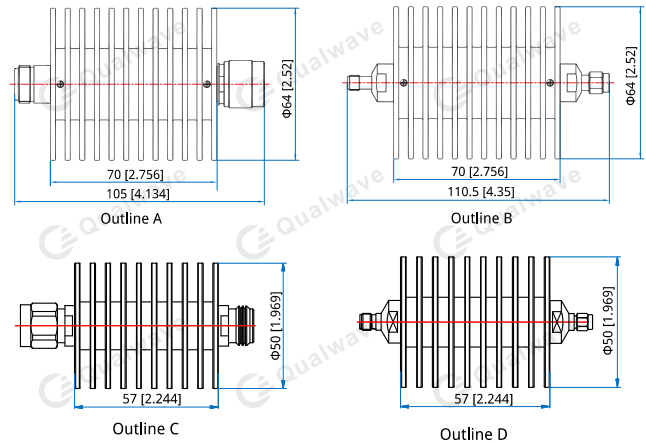
### Environmental

Temperature: -55~+125°C

### Peak Power

Peak Power (W)	Pulse Width (μS)	Duty Cycle (%)	Applicable Scope
500	5	5	@SMA,DC~18GHz
5000		0.5	@N,DC~12.4GHz
1000		2.5	@N,18GHz

### Outline Drawings



Unit: mm [in]  
 Tolerance:  $\pm 2\text{mm}$  [ $\pm 0.08\text{in}$ ]

### How To Order

**QFA1850-X-Y-Z**

X: Frequency in GHz  
 Y: Attenuation in dB  
 Z: Connector type

Connector naming rules:

N - N (Outline A, C)  
 S - SMA (Outline B, D)

Examples:

To order an attenuator, DC-12.4GHz, N male to N female, 3dB attenuation, specify QFA1850-12.4-3-N.

## Length (mm/in)

Attenuation (dB)	Frequency (GHz)	N	SMA
1~10, 15, 20	DC~4GHz	57 [2.244]	57 [2.244]
1~10, 15, 20	DC~8GHz	57 [2.244]	57 [2.244]
1~10, 15, 20, 30, 40, 50	DC~12.4GHz	70 [2.756]	70 [2.756]
1~10, 15, 20, 30, 40, 50	DC~18GHz	70 [2.756]	70 [2.756]

## Attenuation Accuracy and VSWR

Frequency (GHz)	Attenuation Accuracy ( $\pm$ dB) vs. Attenuation (dB)				VSWR (max.)
	1~10	11~20	21~30	31~50	
DC~4	0.4	0.5	0.7	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	1.1	1.35
DC~18	0.8	0.9	1.1	1.3	1.45

## Typical Performance Curves

### N (DC~8GHz)

