

Product Specification	Part		
RF Power Flange Attenuators	CQA Flange Series		

# 1. CQA Flange Attenuators This type is designed to RF device

2. Dimensional specifications are detailed per the following draft of Fig.1

RF Power: 100W 150W Attenuations: 10dB to 30dB Frequency: DC to 3GHz

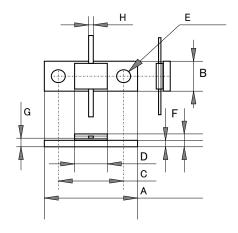


Fig. 1

# 2-1. Part Designations (Unit: mm)

Part	А	В	С	D	Е	F	G	Н
CQA100F	20.30	5.70	14.50	6.50	3.30	1.50	2.50	1.20
CQA150F	22.30	6.30	15.80	6.50	3.30	1.50	2.50	1.20

# 2-2. Ordering Information

Part No.	Power	Frequency	Attenuation	Impedance	Package
CQA100F-10dB	100W	3.0Ghz	10dB	50 ohm	1000
CQA150F-10dB	150W	2.7Ghz	10dB	50 ohm	1000

#### 3. Note

Additional Process Code Terminal conductor, solder plated Sn/Ag.

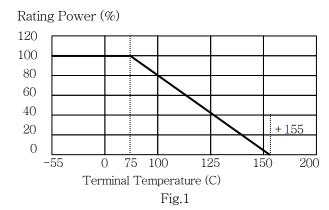


## 4. Rating.

#### 4-1. Rating Power with Heat Sink (Fig.1)

Resistors have power rating based on full load operation at terminals temperature from

- 55C to + 155C. Operating power shall be derated as figure 2 in operating at excess of
- + 155C of terminal temperature.



#### 4-2. General Electrical Specifications

Items	Specif	Condition	
Part	CQA100F	CQA150F	
Rating RF In Put power	100 W	150W	
Attenuations	10, 20, 30dB	10, 20, 30dB	±1dB
Frequency	DC to 3GHz	DC to 2.7GHz	
Impedance	50 ohm	50 ohm	
VSWR(DC to 2 GHz)	1.20:1	1.20:1	
VSWR(2GHz to 5GHz)	1.25:1	1.25:1	



## 5. Electrical and mechanical Specifications

Items	Specifications	Test Conditions
Operation Temp. Range	-55 to +155 ℃	
Storage Temp. Range	-55 to +155 ℃	
Withstanding Voltage	1,500 Volt	60 seconds.
Load Life	$\pm (1.0\% + 0.05 \text{ ohm})$	25℃ 90min ON, 30min OFF, 1000hours.
Humidity	$\pm (1.0\% + 0.05 \text{ ohm})$	40°C 90−95% RH, DC 0.1W, 1000hours.
Temperature Cycle	$\pm (0.25\% + 0.05 \text{ ohm})$	-55 °C 30min., + 155 °C 30min., 5cycles.
Soldering Heat	$\pm (0.25\% + 0.05 \text{ ohm})$	350±5℃, 3seconds,
Solderability	Over 3/4 of surface	230±5℃, 3seconds.
Insulation Resistance	Over 1000 Mohm	Between terminals and resistor body.
Vibration	$\pm (0.25\% + 0.05 \text{ ohm})$	

#### 6. Quality Assurance

Cqtel shall be assure to the CiTEL customers of the resistors quality. Receiving fault report from the customer, analyzing the cause of fault and reporting of QA to the customer shall be obligation of Cqtel, because brand of the attenuators and CQA series is right of CiTEL

## 7. Country of Origin

The attenuators are produced at KOREA main factory of CiTEL Co., Ltd.