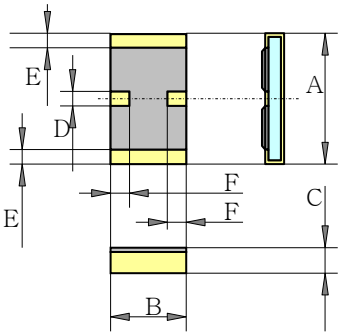
Product Specification/ 23.2nd	Part
RF Power Chip Attenuators	CQA Chip Series

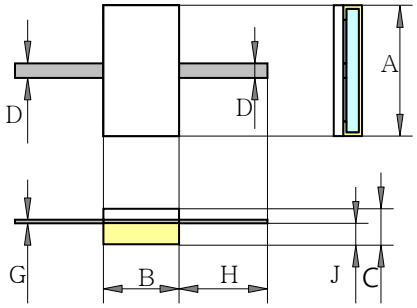
* Specifications, appearance, performance, functions, etc, may be changed without notice

1. This type is designed to RF device

2. Dimensional specifications are detailed per the following draft



Type A



Type B

Part Dimensional (Unit : mm)

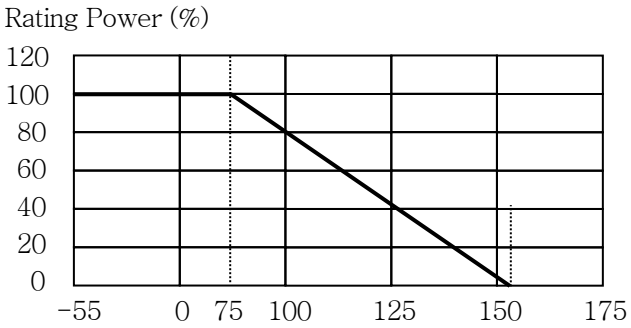
Ordering Information

Part No.	RF Power	Frequency	Attenuation	Impedance	Type
CQA02S-10dB	2W	10GHz	10dB	50ohm	A
CQA05S-10dB	5W	6.0GHz	10dB	50ohm	A
CQA100S-10dB	100W	4.0GHz	10dB	50ohm	A
CQA100T-10dB	100W	4.0GHz	10dB	50ohm	B
CQA150S-10dB	150W	3.0GHz	10dB	50ohm	A
CQA150T-10dB	150W	3.0GHz	10dB	50ohm	B

Part Designations (Unit : mm)

Part	A	B	C	D	E	F	G
CQA02S	5.60	4.50	0.80	1.30	0.60	1.30	
CQA05S	6.00	3.00	0.80	0.50	0.80	0.50	
CQA100S	8.90	5.80	1.00	1.10	0.30	1.50	
CQA100T	8.90	5.80	1.50	1.00	0.10	5.50	1.10
CQA150S	11.40	7.60	1.00	1.00	0.30	1.50	
CQA150T	11.40	7.60	2.00	1.00	0.10	6.30	1.20

3. Rating Power with Heat Sink



4. General Electrical Specifications

Items	Specification				Condition
Part	CQA02S	CQA05S	CQA100S	CQA150S	
Rating RF power	2 W	5 W	100 W	150W	
Attenuations	0dB to 20dB	1dB to 10dB			±0.5dB
Attenuations			10, 20, 30dB	10, 20, 30dB	±1dB
Frequency	DC to 10GHz	DC to 6.0GHz	DC to 4.0GHz	DC to 3.0GHz	
Impedance	50 ohm	50 ohm	50 ohm	50 ohm	
VSWR(Max)	1.25 : 1	1.25 : 1	1.25 : 1	1.25 : 1	

Note: Other Attenuation values and tolerances available upon request

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	±(1.0% + 0.05 ohm)	25℃ 90min ON, 30min OFF, 1000hours.
Humidity	±(1.0% + 0.05 ohm)	40℃ 90-95% RH, DC 0.1W, 1000hours.
Temperature Cycle	±(0.25% + 0.05 ohm)	-55℃ 30min., + 155℃ 30min., 5cycles.
Soldering Heat	±(0.25% + 0.05 ohm)	350±5℃, 3seconds,
Solderability	Over 3/4 of surface	230±5℃, 3seconds.
Insulation Resistance	Over 1000 Mohm	Between terminals and resistor body.
Vibration	±(0.25% + 0.05 ohm)	

6. Country of Origin

The Attenuators are produced at KOREA main factory of Cqtel Co.