

Product Specification	Part
RF Power Flange Resistor	CQR Flange Series

1. CQR Flange Resistors

This type is designed to fulfill RF splitter

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

RF Power : 20W to 250W
 Resistance : 100 ohm
 Frequency : DC to 3GHz

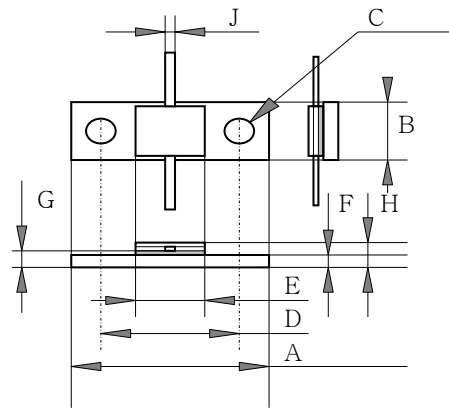


Fig.1

2-1. Part Designations (Unit : mm)

Part	A	B	C	D	E	F	G	H	J
CQR20F	12.60	5.20	2.80	7.20	3.10	1.50	2.20	3.40	0.80
CQR100F	20.30	5.70	3.20	14.20	7.20	1.50	2.20	3.40	0.80
CQR150F	22.30	6.30	3.20	15.80	8.50	1.50	2.50	2.70	1.00
CQR250F	25.10	9.60	3.40	18.40	10.00	3.00	4.10	4.70	3.00

2-2. Ordering Information

Part No.	RF Power	Frequency	TCR	Resistance	Tolerance	Package
CQR20F-101NI	20W	DC to 2.5GHz	±200ppm/°C	100 ohm	±1%. 3%	1000
CQR100F-101NI	100W	DC to 3.0GHz	±200ppm/°C	100 ohm	±1%. 3%	1000
CQR150F-101NI	150W	DC to 2.5GHz	±200ppm/°C	100 ohm	±1%. 3%	1000
CQR250F-101NI	250W	DC to 2.5GHz	±200ppm/°C	100 ohm	±1%. 3%	1000

3. Note

Additional Process Code Terminal conductor, solder plated Sn/ Ag

4. Rating

4-1. Rating Power with Heat Sink(Fig.2)

Resistors have power rating based on full load operation at terminals temperature from - 55 to + 155°C. Operating power shall be derated as figure 2 in operating at excess of + 155°C of terminal temperature

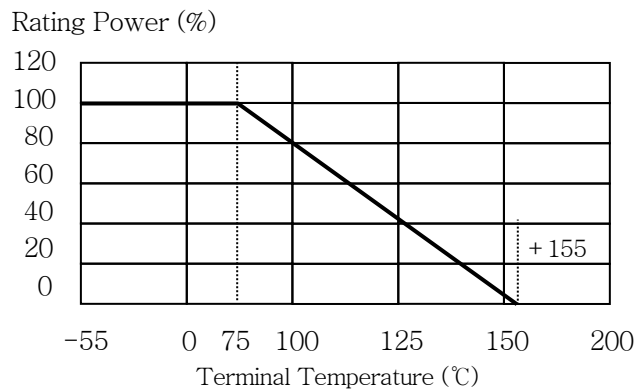


Fig.2

4-2. General Electrical Specifications

Items	Specification	Condition
Part	CQR Flange Series	
Rating RF power	20W to 250W	4-1
Resistance Values	100 ohm	Standard
Frequency	DC to 3GHz	
VSWR(Max)	1.25 : 1	
Temp. Coefficient of Resistance.	±200ppm/°C	-55 to + 155°C
Tolerance of Resistance	±1%, 3%	
Equivalent Parallel Capacitance	2.5 pF Max.	

Note: Other resistance values and tolerances available upon request

5. Electrical and mechanical Specifications

Items	Specifications	Test Conditions
Operation Temp. Range	-55 to + 155 °C	
Storage Temp. Range	-55 to + 155 °C	
Withstanding Voltage	1,500 Volt	60 seconds.
Load Life	$\pm(1.0\% + 0.05 \text{ ohm})$	25°C 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 \pm 5°C, 3seconds,
Solderability	Over 3/4 of surface	230 \pm 5°C, 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 resistor and CQR Flange series is right of CiTEL

7. Country of Origin

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