

Product Specification	Part
RF Power Rod Resistors	CQR20 ROD Series (Non Inductive)

1. CQR20 ROD Resistors

This type is designed to fulfill multiband RF splitter

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

RF Power : 10W 20W
Resistance : 100 to 600 ohm
Frequency : DC to 12GHz

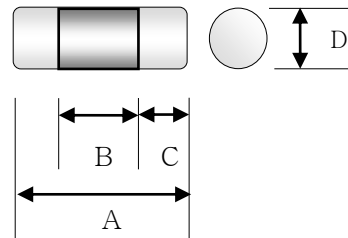


Fig.1

2-1. Part Designations (Unit: mm)

Part	A	B	C	D
CQR20A	2.70	1.30	0.70	1.30
CQR20B	5.20	2.20	1.50	1.70

2-2. Ordering Information

Part No.	RF Power	Frequency	TCR	Resistance	Tolerance	Package
CQR20A-101AG	10W	DC to 12GHz	±200ppm/°C	100 ohm	±1%, 3%	1000
CQR20B-101AG	20W	DC to 6GHz	±200ppm/°C	100 ohm	±1%, 3%	1000

3. Note

3-1. Model

Model description shall be as CQR20 ROD Series

3-2. TC (Temperature Coefficient of Resistance)

TC shall be only ±200ppm/K and expressed as °C

3-3. Resistance Tolerance

Resistance Tolerance shall be ±1%, 3%

3-4. Additional Process Code Terminal conductor, solder plated 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

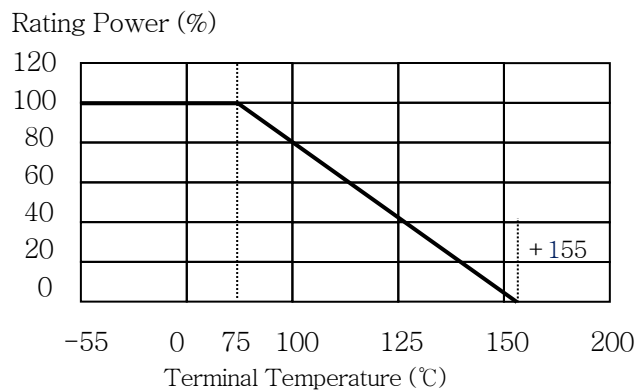


Fig.2

4-2. General Electrical Specifications

Items	Specification		Condition
	CQR20A	CQR20B	
Part	CQR20A	CQR20B	
Rating RF power for dividing	10W	20W	4-1
Frequency	DC to 12GHz	DC to 6GHz	
Resistance Values	100, 150, 200, 250, 300, 350, 400, 600 ohm		Standard
VSWR(Max)	1.20 : 1		
Temp. Coefficient of Resistance.	±200ppm/°C		-55 to + 155°C
Tolerance of Resistance	±3%		Standard
Equivalent Parallel Capacitance	1.0 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 CQR20 ROD series is right of CiTEL

7. Country of Origin

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