

Product Specification	Part
RF Power Rod Terminations	CQT ROD Series (Non Inductive)

1. CQT ROD Terminations

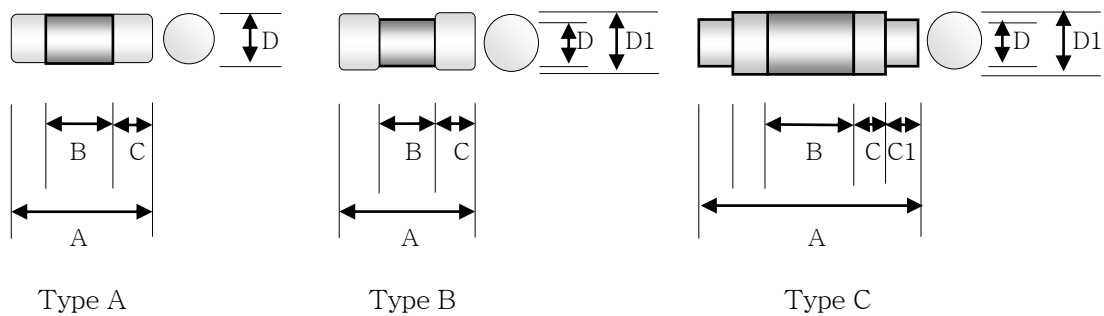
This type is designed to RF Termination

2. Dimensional specifications are detailed per the following draft of Type A, B, C

RF Power : 1W to 100W

Resistance : 50ohm 75ohm

Frequency : DC to 28GHz



2-1. Part Designations (Unit : mm)

Part	Type	A	B	C	C1	D	D1
CQT02R	A	2.70	1.00	0.90		1.30	
CQT02R	B	3.00	1.20	0.90		1.30	1.63
CQT05R	A	5.20	2.20	1.50		1.70	
CQT10R	A	10.00	4.40	3.30		3.00	
CQT10R	A (New)	10.00	5.60	2.20		3.00	
CQT20R	A	14.00	5.60	4.20		4.50	
CQT50R	A	23.00	10.00	6.50		7.00	
CQT50RA	C	25.30	14.50	2.20	3.20	5.20	6.20
CQT100R	A	19.00	9.00	5.00		9.50	

2-2. Ordering Information

Part No.	Type	RF Power	Frequency	TCR	Resistance	Tolerance	Package
CQT02R-500UG	A	1W	DC to 28GHz	±200ppm/°C	50 ohm	±1%	10000
CQT02R-500AG	A	1W	DC to 18GHz	±200ppm/°C	50 ohm	±1%	10000
CQT02R-500C	B	1W	DC to 6GHz	±200ppm/°C	50 ohm	±1%	10000
CQT05R-500AG	A	2W	DC to 12GHz	±200ppm/°C	50 ohm	±1%, 3%	10000
CQT05R-500C	B	2W	DC to 4GHz	±200ppm/°C	50 ohm	±1%, 3%	10000
CQT10R-500NIA	A	5W	DC to 8GHz	±200ppm/°C	50 ohm	±2%	1000
CQT10R-500NIB	A	5W	DC to 8GHz	±200ppm/°C	50 ohm	±2%	1000
CQT20R-500AG	A	10W	DC to 10GHz	±200ppm/°C	50 ohm	±1%, 3%	1000
CQT50R-500AG	A	30W	DC to 10GHz	±200ppm/°C	50 ohm	±1%, 3%	500
CQT50RA-500AG	C	50W	DC to 12GHz	±200ppm/°C	50 ohm	±1%, 3%	100
CQT100R-500AG	A	100W	DC to 10GHz	±200ppm/°C	50 ohm	±1%, 3%	100

3. Rating.

3-1. Rating Power with Heat Sink (Fig.1)

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

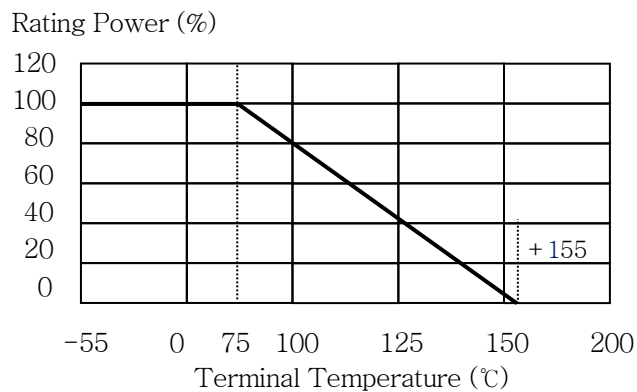


Fig.1

3-2. General Electrical Specifications

Items	Specification	Condition
Rating RF power for Coaxial	1W to 100W	3-1
Resistance Values	50 ohm	Standard
Frequency	DC to 28GHz	
VSWR(Max)	1.20 : 1	
Temp. Coefficient of Resistance.	±200ppm/°C	-55 to + 155°C
Tolerance of Resistance	±1% , 2% , 3%	
Equivalent Parallel Capacitance	1.0 pF Max.	

Note: Other resistance values and tolerances available upon request

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

5. 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 CQT ROD series is right of CiTEL

6. Country of Origin

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