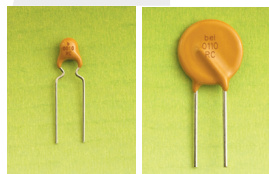


# Radial Leaded PTC

## 0ZRC Series

RoHS6 Compliant

0ZRC1006D



### Application

Telecom and wide variety of electronic equipment

### Product Features

Low Hold Current, 90V rating - replaces 30, 60 and 72V rated devices

### Operating (Hold Current) Range

100mA ~ 3.75A

### Maximum Voltage

Up to 90V

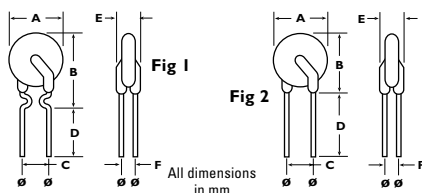
### Temperature Range

-40°C to 85°C

### Agency Approval

UL Component (E305051)

### Product Dimensions



Part Number	Fig	Lead Size Ø	A		B		C		D		E		F	
			Max	Typical	Max	Typical	Max	Typical	Max	Typical	Max	Typical	Max	Typical
0ZRC0010-0025	1	0.51	7.4	12.7	5.1	7.6	3.1	1.1						
0ZRC0030	1	0.51	7.4	13.0	5.1	7.6	3.1	1.1						
0ZRC0035	1	0.51	7.4	12.7	5.1	7.6	3.1	1.1						
0ZRC0040	1	0.51	7.6	13.5	5.1	7.6	3.1	1.1						
0ZRC0050	1	0.51	7.9	13.7	5.1	7.6	3.1	1.1						
0ZRC0055	1	0.51	9.7	14.0	5.1	7.6	3.1	1.1						
0ZRC0065	1	0.51	9.7	14.5	5.1	7.6	3.1	1.1						
0ZRC0075	1	0.51	10.4	15.2	5.1	7.6	3.1	1.1						
0ZRC0090	1	0.51	11.7	15.8	5.1	7.6	3.1	1.1						
0ZRC0110	2	0.81	13.0	18.0	5.1	7.6	3.1	1.4						
0ZRC0135	2	0.81	14.5	19.6	5.1	7.6	3.1	1.4						
0ZRC0160	2	0.81	16.3	21.3	5.1	7.6	3.1	1.4						
0ZRC0185	2	0.81	17.8	22.9	5.1	7.6	3.1	1.4						
0ZRC0250	2	0.81	21.3	26.4	10.2	7.6	3.1	1.4						
0ZRC0300	2	0.81	24.9	30.0	10.2	7.6	3.1	1.4						
0ZRC0375	2	0.81	28.5	33.5	10.2	7.6	3.1	1.4						

### Standard Package

P/N	Bulk		Reel/Tape	
	Pcs/Box	P/N Code	Pcs/Reel	P/N Code
0ZRC0010-0090	3000	1E	3000	2E
0ZRC0110-0185	1000	1A	1500	2B
0ZRC0250-0375	1000	1A	n/a	n/a

### Electrical Characteristics (23°C)

	Part Number	Hold Current I <sub>H</sub> , A	Trip Current I <sub>T</sub> , A	Max Time to Trip @ 5xI <sub>H</sub> Seconds	Max Current I <sub>max</sub> , A	Rated Voltage V <sub>max</sub> , V <sub>dc</sub>	Typical Power P <sub>d</sub> , W	Resistance Tolerance		
								R <sub>min</sub> Ohms	R <sub>max</sub> Ohms	R <sub>1max</sub> Ohms
A	0ZRC0010	0.10	0.20	4.0	40	90	0.38	2.50	6.000	7.50
B	0ZRC0015	0.15	0.35	10.0	40	90	0.70	2.40	5.500	7.00
C	0ZRC0017	0.17	0.34	3.0	40	90	0.48	2.00	3.720	5.00
D	0ZRC0020	0.20	0.40	2.2	40	90	0.41	1.83	3.300	4.40
E	0ZRC0025	0.25	0.50	2.5	40	90	0.45	1.25	2.280	3.00
F	0ZRC0030	0.30	0.60	3.0	40	90	0.49	0.88	1.596	2.10
G	0ZRC0035	0.35	0.75	10.0	40	90	1.30	0.70	1.300	2.50
H	0ZRC0040	0.40	0.80	3.8	40	90	0.56	0.55	1.032	1.29
I	0ZRC0050	0.50	1.00	4.0	40	90	0.77	0.50	0.770	1.17
J	0ZRC0055	0.55	1.20	10.0	40	90	1.50	0.40	0.720	1.50
K	0ZRC0065	0.65	1.30	5.3	40	90	0.88	0.31	0.520	0.72
L	0ZRC0075	0.75	1.50	6.3	40	90	0.92	0.25	0.400	0.60
M	0ZRC0090	0.90	1.80	7.2	40	90	0.99	0.20	0.330	0.47
N	0ZRC0110	1.10	2.20	8.2	40	90	1.50	0.15	0.300	0.38
O	0ZRC0135	1.35	2.70	9.6	40	90	1.70	0.12	0.228	0.30
P	0ZRC0160	1.60	3.20	11.4	40	90	1.90	0.09	0.180	0.22
Q	0ZRC0185	1.85	3.70	12.6	40	90	2.10	0.08	0.144	0.19
R	0ZRC0250	2.50	5.00	15.6	40	90	2.50	0.05	0.960	0.13
S	0ZRC0300	3.00	6.00	19.8	40	90	2.80	0.04	0.720	0.10
T	0ZRC0375	3.75	7.50	24.0	40	90	3.20	0.03	0.600	0.08

**I<sub>H</sub>** Hold current-maximum current at which the device will not trip in still air at 23°C.

**I<sub>T</sub>** Trip current-minimum current at which the device will always trip in still air at 23°C.

**I<sub>max</sub>** Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>).

**V<sub>max</sub>** Maximum voltage device can withstand without damage at its rated current.

**P<sub>d</sub>** Typical power dissipated from device when in the tripped state in 23°C still air environment.

**R<sub>min</sub>** Minimum device resistance at 23°C.

**R<sub>max</sub>** Maximum device resistance at 23°C.

**R<sub>1max</sub>** Maximum device resistance at 23°C, 1 hour after initial device trip.

### Physical specifications

#### Lead material

0ZRC0010 ~ 0090 - Tin plated copper, 24 AWG.

0ZRC0110 ~ 0375 - Tin plated copper, 20 AWG.

#### Soldering characteristics

MIL-STD-202, Method 208E.

#### Insulating coating

Flame retardant epoxy, meets UL-94-V-0 requirements.

### PTC Marking

"bel" or "b", I<sub>H</sub> code and "RC".

Specifications subject to change without notice

# Radial Leaded PTC

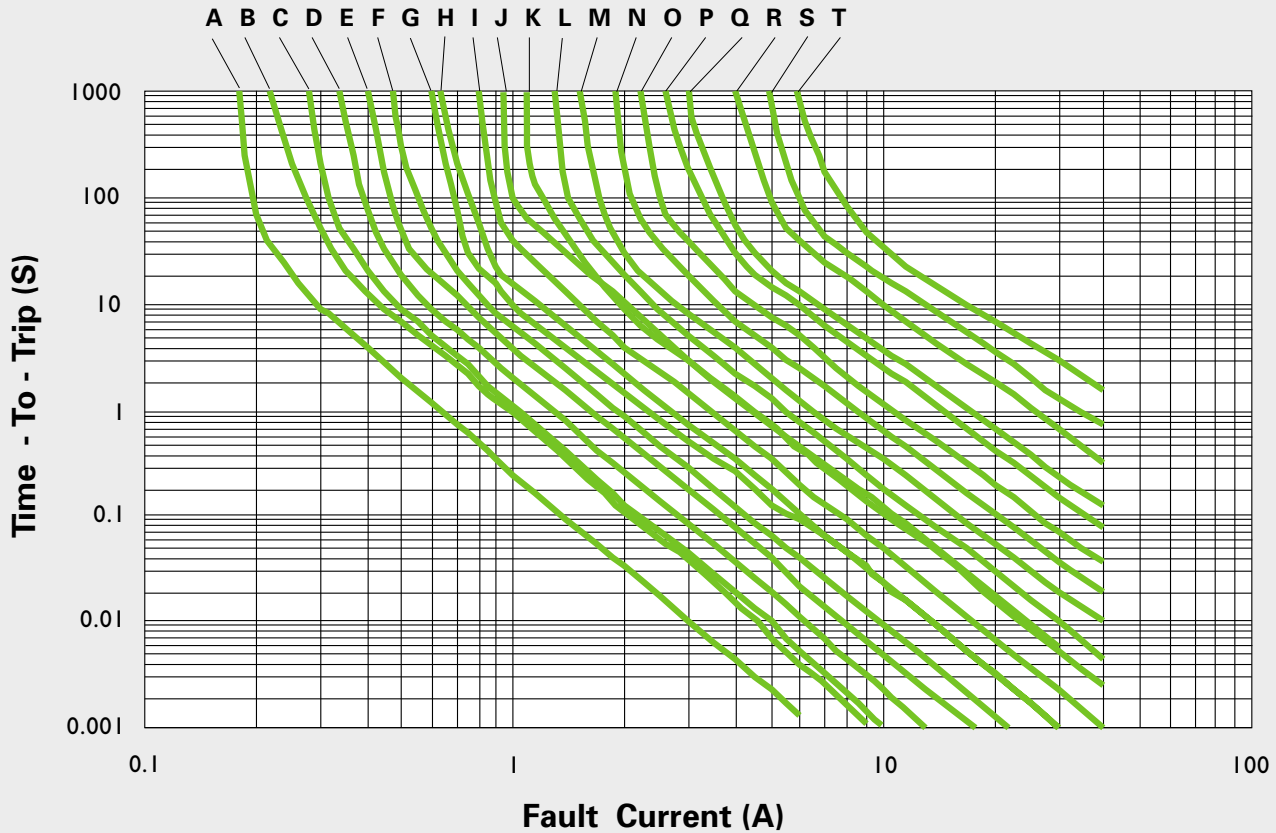
## OZRC Series

RoHS6 Compliant

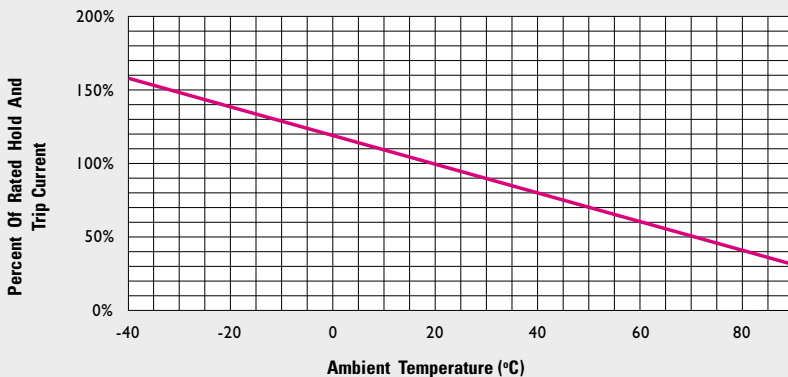
OZRC1006C

### Typical Time - To - Trip at 23°C

(See Elec. Characteristics Table for P/N - Curve Correlation)



### Thermal Derating Curve



### Cautionary Notes

1. Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.
2. These Polymer PTC (PPTC) devices are intended for protection against occasional overcurrent/ overtemperature fault conditions and may not be suitable for use in applications where repeated and/ or prolonged fault conditions are anticipated.
3. Avoid contact of PTC device with chemical solvent. Prolonged contact may adversely impact the PTC performance.
4. These PTC devices may not be suitable for use in circuits with a large inductance, as the PTC trip can generate circuit voltage spikes above the PTC rated voltage.

Specifications subject to change without notice

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