

defining a degree of excellence

Radial Leaded PTC OZRC Series

RoHS6 Compliant

0ZRC1007D





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

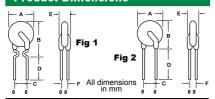
TUV (Std. EN60738-1-1, Cert. R50102187, Part No. 0ZRC0040-0ZRC0375)

UL Component (Std. UL1434, File E305051)

UL Conditions of Acceptability:

- 1. These devices have been investigated for use in safety circuits and are suitable as a limiting device.
- 2.These devices have been calibrated to limit the current to 8 amps within 5 seconds, per ANSI/NFPA 70, "National Electrical Code"

Product Dimensions



Part	Fig	Lead Size	A	В	С	D	Е	F
Number		Ø	Max	Max	Typical	Min	Max	Typical
0ZRC0010FF-0025FF	1	0.51	7.4	12.7	5.1	7.6	3.1	1.1
OZRC0030FF	1	0.51	7.4	13.0	5.1	7.6	3.1	1.1
0ZRC0035FF	1	0.51	7.4	12.7	5.1	7.6	3.1	1.1
OZRCO040FF	1	0.51	7.6	13.5	5.1	7.6	3.1	1.1
OZRC0050FF	1	0.51	7.9	13.7	5.1	7.6	3.1	1.1
0ZRC0055FF	1	0.51	9.7	14.0	5.1	7.6	3.1	1.1
OZRCO065FF	1	0.51	9.7	14.5	5.1	7.6	3.1	1.1
OZRCO075FF	1	0.51	10.4	15.2	5.1	7.6	3.1	1.1
OZRCO090FF	1	0.51	11.7	15.8	5.1	7.6	3.1	1.1
OZRCO110FF	2	0.81	13.0	18.0	5.1	7.6	3.1	1.4
OZRCO135FF	2	0.81	14.5	19.6	5.1	7.6	3.1	1.4
OZRCO160FF	2	0.81	16.3	21.3	5.1	7.6	3.1	1.4
OZRCO185FF	2	0.81	17.8	22.9	5.1	7.6	3.1	1.4
OZRCO250FF	2	0.81	21.3	26.4	10.2	7.6	3.1	1.4
0ZRC0300FF	2	0.81	24.9	30.0	10.2	7.6	3.1	1.4
OZRCO375FF	2	0.81	28.5	33.5	10.2	7.6	3.1	1.4

Standard Package

P/N	В	ulk	Reel/Tape			
F7N	Pcs / Box	P/N Code	Pcs / Reel	P/N Code		
0ZRC0010FF-0090FF	3000	1E	3000	2E		
OZRCO110FF-0185FF	1000	1A	1500	2B		
0ZRC0250FF-0375FF	1000	1A	n/a	n/a		

Electrical Characteristics (23°C)

	Part	Hold Current	Trip Current	Max Time to Trip @ 5xIH	Max Time to Trip @ 8 A (See UL Note 2)	Max Current	Rated Voltage	Typical Power	Resistance Tolerance		
	Number (Bulk)								Rmin	Rmax	R1 _{max}
	(= 1.1.9)	IH, A	lτ, Α	Seconds	Seconds	Imax, A	V _{max} , V _{dc}	Pd, W	Ohms	Ohms	Ohms
A	OZRCOO10FF1E	0.10	0.20	4.0	0.001	40	90	0.38	2.50	6.000	7.50
В	OZRCO015FF1E	0.15	0.35	10.0	0.002	40	90	0.70	2.40	5.500	7.00
C	OZRCO017FF1E	0.17	0.34	3.0	0.003	40	90	0.48	2.00	3.720	8.00
D	OZRCO020FF1E	0.20	0.40	2.2	0.005	40	90	0.41	1.83	3.300	4.40
E	0ZRC0025FF1E	0.25	0.50	2.5	0.010	40	90	0.45	1.25	2.280	3.00
F	OZRCO030FF1E	0.30	0.60	3.0	0.020	40	90	0.49	0.88	1.596	2.10
G	0ZRC0035FF1E	0.35	0.75	10.0	0.050	40	90	1.30	0.70	1.300	2.50
Н	OZRCOO40FF1E	0.40	0.80	3.8	0.050	40	90	0.56	0.55	1.032	1.29
T	0ZRC0050FF1E	0.50	1.00	4.0	0.100	40	90	0.77	0.50	0.770	1.17
J	0ZRC0055FF1E	0.55	1.20	10.0	0.200	40	90	1.50	0.40	0.720	1.50
K	OZRCO065FF1E	0.65	1.30	5.3	0.200	40	90	0.88	0.31	0.520	0.72
ī	0ZRC0075FF1E	0.75	1.50	6.3	0.400	40	90	0.92	0.25	0.400	0.60
М	0ZRC0090FF1E	0.90	1.80	7.2	0.600	40	90	0.99	0.20	0.330	0.47
N	OZRCO110FF1A	1.10	2.20	8.2	1.000	40	90	1.50	0.15	0.300	0.38
0	OZRCO135FF1A	1.35	2.70	9.6	2.000	40	90	1.70	0.12	0.228	0.30
P	OZRCO160FF1A	1.60	3.20	11.4		40	90	1.90	0.09	0.180	0.22
Q	OZRCO185FF1A	1.85	3.70	12.6		40	90	2.10	0.08	0.144	0.19
R	OZRCO250FF1A	2.50	5.00	15.6		40	90	2.50	0.05	0.096	0.13
S	OZRCO300FF1A	3.00	6.00	19.8		40	90	2.80	0.04	0.072	0.10
T	OZRCO375FF1A	3.75	7.50	24.0		40	90	3.20	0.03	0.060	0.08

H Hold current-maximum current at which the device will not trip in still air at 23°C.
 Trip current-minimum current at which the device will always trip in still air at 23°C.
 Imax Maximum fault current device can withstand without damage at rated voltage (Vmax).

V_{max} Maximum voltage device can withstand without damage at its rated current.

P_d Typical power dissipated by device when in tripped state in 23°C still air environment.

Rmin Minimum device resistance at 23°C.
Rmax Maximum device resistance at 23°C.

R1max Maximum device resistance at 23°C, 1 hour after initial device trip.

Physical specifications

Lead material

0ZRC0010 - 0ZRC0040 - Tin plated copper clad steel, 24 AWG.

0ZRC0050 - 0ZRC0090 - Tin plated copper, 24 AWG

0ZRC0110 - 0ZRC0375 - 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", IH code and "RC".

Specifications subject to change without notice

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Radial Leaded PTC

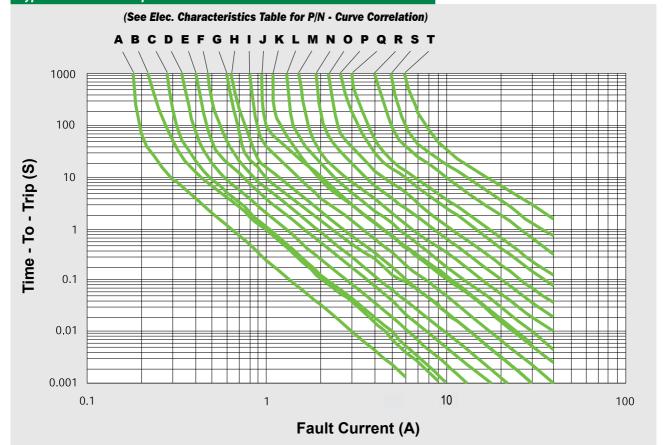
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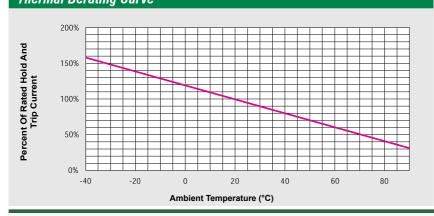


0ZRC1007C

Typical Time - To - Trip at 23°C



Thermal Derating Curve



Cautionary Notes

- Operation beyond the specified maximum ratings or improper use may result in damage and pos sible electrical arcing and/or flame.
- 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.
- Avoid contact of PTC device with chemical solvent.
 Prolonged contact may adversely impact the PTC performance.
- 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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