

defining a degree of excellence

Radial Leaded PTC OZRE Series

RoHS6 Compliant

0ZRE1007D





Application

Line Voltage Power Supply, Transformer and Appliances

Product Features

Continuous Use at Voltages up to 240V AC/DC, Low Hold Current, 265V AC/DC Max Interrupt Voltage

Operating (Hold Current) Range

50mA ~ 550mA

Maximum Operating Voltage 240VAC/DC

Maximum Interrupt Voltage

265VAC/DC **Temperature Range**

40°C to 85°C-

Agency Approval

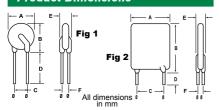
TUV (Std. EN60738-1-1, Cert. R50102173)

UL Component (Std. UL1434, File E305051)

UL Conditions of Acceptability:

These devices have been investigated for use in safety circuits and are suitable as a limiting device.

Product Dimensions



Part	Fig	Lead Size	A	В	С	D	Е	F
Number		Ø	Max	Max	Typical	Min	Max	Typical
OZREO005FF to OZREO012FF	1	0.51	8.3	10.7	5.1	7.6	3.8	1.4
OZREO016FF	1	0.51	9.9	12.5	5.1	7.6	3.8	1.4
OZREO025FF	2	0.65	9.6	17.4	5.1	7.6	3.8	1.4
0ZRE0033FF	2	0.65	11.4	16.5	5.1	7.6	3.8	1.4
OZREO040FF	2	0.65	11.5	19.5	5.1	7.6	3.8	1.4
0ZRE0055FF	2	0.81	14.0	21.7	5.1	7.6	4.1	1.4

Standard Package

P/N	В	ulk	Reel/Tape			
F/N	Pcs / Box	P/N Code	Pcs / Reel	P/N Code		
0ZRE0005FF-0016FF	2000	10	2000	20		
0ZRE0025FF	3000	1E	1500	2B		
OZRE0033FF-0040FF	1000	1A	1500	2B		
0ZRE0055FF	1000	1A	1000	2A		

Electrical Characteristics (23°C)

	Part Number	Hold	Trip	Max Time to Trip	Max Current	Rated Voltage	Typical Power	Resistance Tolerance		
		Current	Current	@ 5x I н				Rmin	Rmax	R1 _{max}
(Bulk)	Ін, А	Iτ, Α	Seconds	I _{max} , A	Vmax, Vac/dc	Pd, W	Ohms	Ohms	Ohms	
A	OZREO005FF1C	0.05	0.12	15.0	1.0	240	0.7	18.50	31.00	65.00
В	OZREO008FF1C	0.08	0.19	15.0	1.2	240	8.0	7.40	12.00	26.00
C	OZREO012FF1C	0.12	0.30	15.0	1.2	240	1.0	3.00	6.50	12.00
D	OZREO016FF1C	0.16	0.37	15.0	2.0	240	1.4	2.50	4.10	7.80
E	OZREO025FF1E	0.25	0.56	18.5	3.5	240	1.5	1.30	2.10	3.80
F	OZREO033FF1A	0.33	0.74	18.5	4.5	240	1.7	0.83	1.24	2.60
G	OZREO040FF1A	0.40	0.90	24.0	5.5	240	2.0	0.60	0.97	1.90
Н	OZREO055FF1A	0.55	1.25	26.0	7.0	240	3.4	0.45	0.73	1.45

IH 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).

Vmax Maximum voltage device can withstand without damage at its rated current.

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

Rmin Minimum device resistance at 23°C. **R**max Maximum device resistance at 23°C.

R1_{max} Maximum device resistance at 23°C, 1 hour after initial device trip.

Physical specifications

Lead material

0ZRE0005 ~ 0ZRE0016 - Tin plated copper clad steel, 24AWG.

0ZRE0025 ~ 0ZRE0040 - Tin plated copper, 22AWG.

0ZRE0055 - Tin plated copper, 20AWG.

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 "RE".

Specifications subject to change without notice

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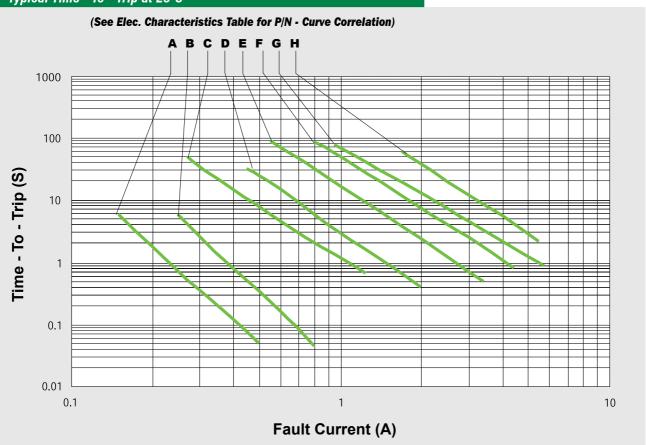
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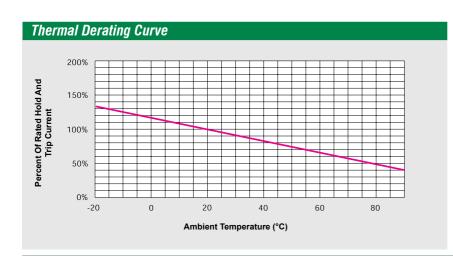
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0ZRE1007C

Typical Time - To - Trip at 23°C





Cautionary Notes

- Operation beyond the specified maximum ratings or improper use may result in damage and possible 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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