

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

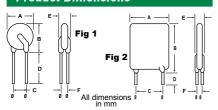
TUV (Std. EN60738-1-1, Cert. R50102173)

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 Number	Fig	Lead Size	Α	В	С	D	Е	F
		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
OZREO055FF	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		
0ZRE0033FF-0040FF	1000	1A	1500	2B		
0ZRE0055FF	1000	1A	1000	2A		

Electrical Characteristics (23°C)

Part	Hold	Trip	Max Time to Trip	Max	Rated	Typical	Resistance Tolerance			
	Number	Current	Current	@ 5x I н	Current	Voltage	Power	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.

IT 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.

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.

R1max 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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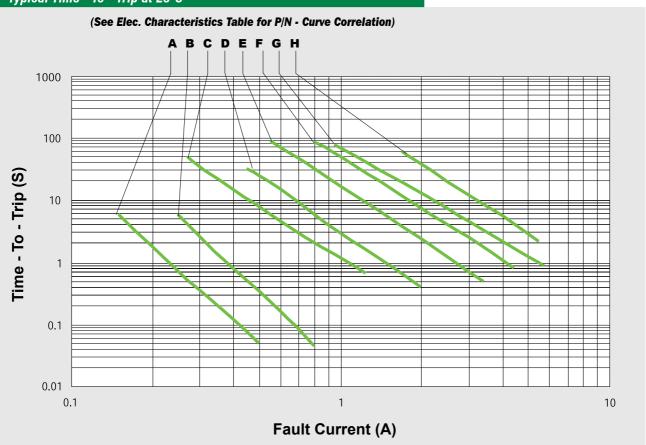
Radial Leaded PTC 0ZRE Series

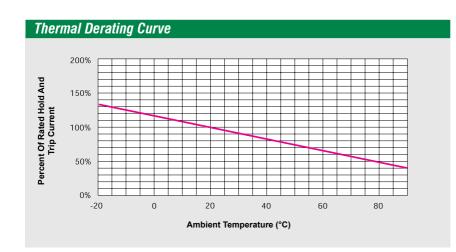
RoHS6 Compliant



0ZRE1007C

Typical Time - To - Trip at 23°C





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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