


# 规格书

## SPECIFICATION

客户 CUSTOMER	立创
客户料号 CUSTOMER P/N	
规格描述 DESCRIPTION	ZNR-25E241K/F12.5-7/L15/绿色
产品编码 PART NUMBER	3-ZNR-25E241K
日期 DATE	2024-07-25

德尔创承认栏 APPROVED BY DERSONIC			客户承认栏 APPROVED BY CUSTOMER	
批准 APPROVED BY	审核 CHECK BY	制订 FORMULATE BY	批准 APPROVED BY	审核 CHECK BY
				

东莞市德尔创电子有限公司

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## 1.OUTLINE

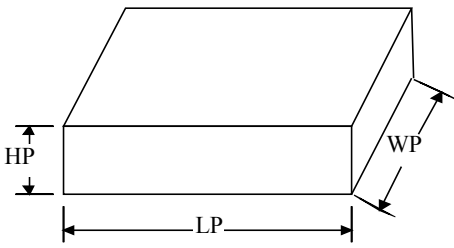
1.1	APPEARANCE	WITHOUT ANY CRACK, MARKING SHOULD BE CLEAR	
1.2	DIMENSIONS	DIMENSIONS (mm)	
		D (max)	29
		H (max)	32
		E(max)	13.5
		d (±0.05)	1.0
		F (±1.0)	12.5
		F1(±1.0)	7
		L(Min.)	15
		Epoxy Colour	Green

## 2.ELETRICAL PARAMETER

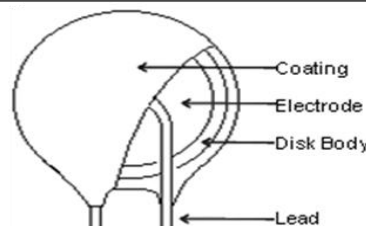
2.1	MAX ALLOWABLE VOLTAGE	AC:150(V)	At 1mA DC
		DC: 200(V)	
2.2	VARISTOR VOLTAGE	216-264(V)	V0.1mA <input type="checkbox"/> V1mA <input checked="" type="checkbox"/>
2.3	RATED WATTAGE	1.2(W)	
2.4	MAX CLAMPING VOLTAGE	IP: 150(A)	Test Current Waveform 8/20 μs
		Vc: 395(V)	
2.5	WITHSTANDING SURGE CURRENT	15000A	Test Current Waveform 8/20μs
2.6	MAX ENERGY	255(J)	Test Current Waveform 10/1000 μs
2.7	TYPICAL CAPACITANCE	2650(pf)	@1KHz
2.8	LEAKAGE CURRENT	≅ 30 (μA)	At 80% of Varistor Voltage
2.9	NONLINEAR EXPONENT (α)	≅ 20	$\alpha = \log \frac{I_1}{I_2} / \log \frac{V_1}{V_2}$
2.10	TEMPERATURE COEFFICENT OF VARISTOR VOLTAGE	≅ ±0.05%/°C max	$\frac{Vc85^{\circ}C - Vc25^{\circ}C}{Vcat25^{\circ}C} \times \frac{1}{60} \times 100(\%^{\circ}C)$
2.11	IMPULSE LIFE	≅ ±10%(V1mA)	Test Current Waveform 8/20 μs

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**3.PACKING**

3.1	Quantity	200PCS		
3.2	Packing Dimension		LP	252max
			HP	66 max
			WP	160max
			Unit: mm	

**4.MATERIAL LIST**

4.1	Drawing			
4.2	Material Chart RoHs	Item	Composition	Manufacturer
		Coating	Epoxy Resin	Made in China, and in line with the UL 94-V0 testing, meet the environmental requirements
		Lead	Cp/Cu wire	Made in China, meet the environmental requirements
		Electrode	Silver	Made in China, meet the environmental requirements
		Disk	Zinc Oxide	Zip Over LLC
		Solder	Sn:96.5%CU 0.5%Ag3.0%	Made in China, meet the environmental requirements

**5. MARKING CODE**

<p>ZNR 25E241K XXX</p> <p>NOTE: XXX is the Production cycle and internal identification code</p>
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## 6.MECHANICAL REQUIREMENTS

6.1	Tensile of Terminations	No Outstanding Damage	2.0Kgf; 10Sec.
6.2	Bending of Terminations	No Outstanding Damage	1.0Kgf; 90° ,3 Times
6.3	Vibration	No Outstanding Damage	Freq:10-55hz;Amp:0.75mm,1Min
6.4	Solderability	Min. 95% of The Terminal Should Be Covered With Solder Uniformly	Solder Temp:265±5°C Immersed Time: ≤5Sec.
6.5	Resistance of soldering heat	△ V1mA/V1mA ≅±5%	Solder Temp: 265±5°C Immersed Time: 10±1Sec.

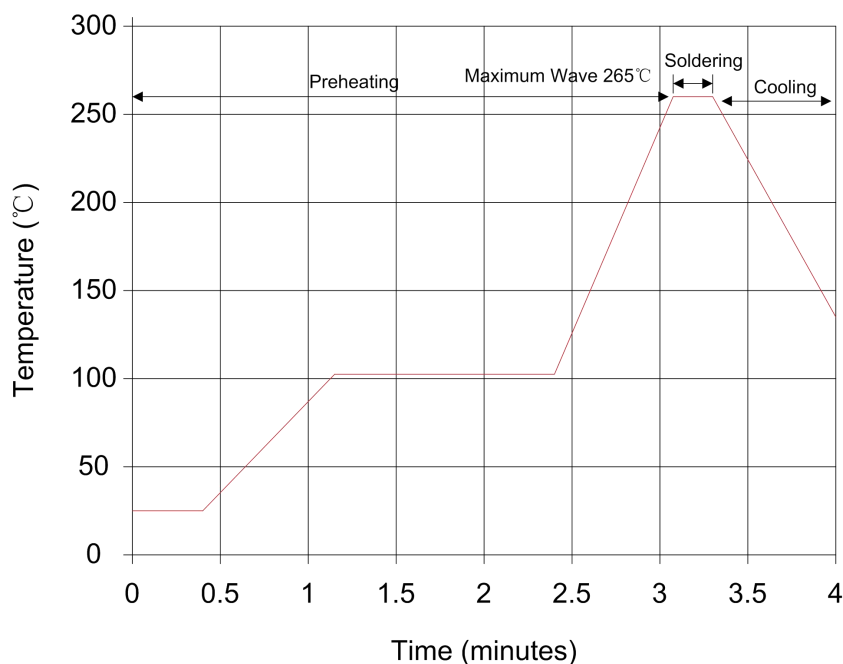
## 7.ENVIRONMENTAL REQUIREMENTS

7.1	High Temperature Storage	△V1mA/V1mA ≅±5%	Ambient Temp: 85±2°C Duration:1000h		
7.2	Low Temperature Storage	△V1mA/V1mA ≅±5%	Ambient Temp: -40±2°C Duration:1000h		
7.3	High Humidity Storage/Damp Heat	△V1mA/V1mA ≅±5%	Ambient Temp: 40±2°C 90-95% R.H. Duration:1000h		
7.4	Temperature Cycle	△V1mA/V1mA ≅±5%	Step	Temperature (°C)	Period (min)
			1	-40±3	30 ±3
			2	Room Temp	15 ±3
			3	85±3	30 ±3
4	Room Temp	15 ±3			
7.5	High Temperature Load	△V1mA/V1mA ≅±10%	Ambient temp:85±2°C Duration:1000h Load: MAX. Allowable Voltage		
7.6	High Humidity Load	△V1mA/V1mA ≅±10%	Ambient Temp: 40±2°C 90-95%R.H.Duration:1000H Load: MAX. Allowable Voltage		
7.7	Operating Temperature Range		-40°C ~ +85°C		
7.8	Storage Temperature Range		-40°C ~ +85°C		
7.9	Fuse temperature (Tf)		136°C		
7.10	Public frequency current		15A/16A		

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### Soldering Recommendation

#### Wave Lead Free Soldering Recommendation



Item	Conditions
Peak Temperature	265°C
Dipping Time	10 seconds (max.)
Soldering	1 time

#### Recommendation Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 seconds (max.)
Distance from Varistor	2mm (min.)