s p e c i f i c a t i o n

Product Specification

name of a part: Type 3362 glass-glazed preadjustable potentiometer BAOTER

fiction: Li Chaozhen

examine and verify: Wang Xianlun

ratify: Shen Gang

date: 2021-1-1

1 product standard

Detailed specification for type 3362 glass glaze pre-potentiometer

GB/T15298-94

2 Ratings and characteristics

2.1 Product appearance and installation method

Installation method: insert the lead end of the potentiometer into the printed plate hole, stick it tightly, and fix it with tin welding.

Product appearance: see Appendix A.

2.2 Rated power consumption: 0.5W

2.3 Nominal resistance value range and resistance value series

Nominal resistance range: 10 Ω ~ 5 MΩ

Resistance series: preferentially choose the E3 series in IEC63, take 1 digit valid number, namely 1,2,5.

2.4 Allowable deviation of the resistance value: ± 10%

2.5 Resistance temperature coefficient

TCR≤±250×10°/℃

(TCR ± 10010 °/℃) as required by the user

2.6 Maximum operating voltage: 250V (DC or AC effective value).

2.7 Resistance voltage (AC peak voltage of 40 to 60 Hz)

8.5KPa：315Vac

101.3KPa：500V

2.8 Climate category: 55 / 125 / 04

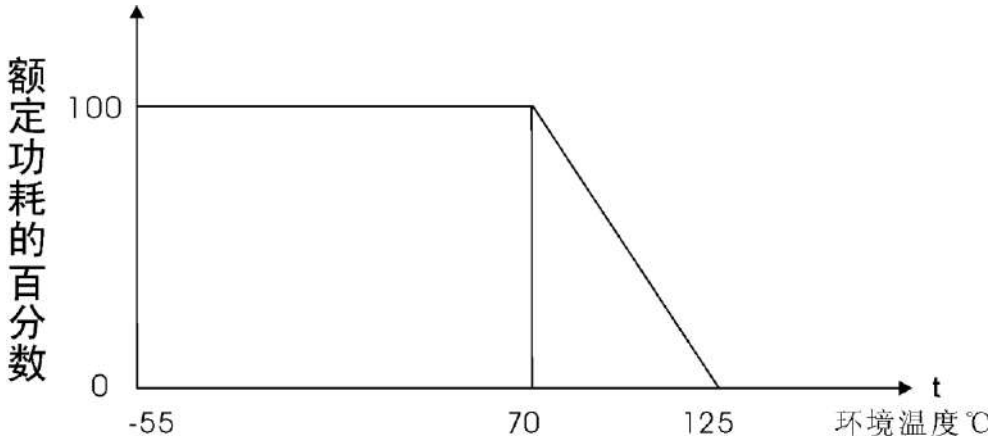
2.9 Total mechanical travel trip: 250 ± 10°

2.10 Stability level: 3%

2.11 Starting moment: 20 mN · m

2.12 Load wear resistance weeks: 200 weeks

2.13 Power consumption reduction curve



3 Logo

3.1 The potentiometer shall be marked with: product trademark, product model and resistance code

3.2 The potentiometer packaging label shall indicate: product trademark, product model, resistance value code, quantity, production year, month, detailed specification code, operator code and ordering unit

4. Test items (parts), test conditions and performance requirements are shown in Table 1

Table 1

GB / T15298-94 bars Paragraph and test items	condition of experiment	performance requirement
4.6 Resistor resistance value		±10%
44.7 Terminal resistance	Rab Rbc	2 Ω or 2%R (Take the big one) 2 Ω or 2%R (Take the big one)
4.5 Continuity	Use the three-use meter resistance gear to measure. The potentiometer moving contact rotation speed is 2 to 5 weeks per minute	The resistance value variation shall be properly and smoothly smooth And it is one-way.
4.15 Rotational noise	With the CRV tester measurement, with a constant current Ib through the moving contact of the potentiometer, the speed of the moving contact for 2 to 5 weeks per minute	3 Ω or 3%R (Take the big one)

4.32 Weldability	Slot welding method temperature:260±5℃ Duration: 5±0.5S	Check the lead end, the solder should be easily flowing and moisten the lead end
4.14 Resistance Temperature Characteristics (250 PPM)	-55℃/20℃ 20℃/70℃ 20℃/125℃	△R/R≤±1.88% △R/R≤±1.25% △R/R≤±2.62%
4.30 Lead end strength	Apply a 5N tensile force to the lead end, Time of action was 10 ± IS. appearance inspection Resistor resistance value	No visible damage △≤± (3%R+0.1Ω)
4.34 Temperature variation	Adjust the potentiometer dynamic contact between 40% and 60% of the total mechanical travel	

Continuation table 1

GB / T15298-94 bars Paragraph and test items	condition of experiment	performance requirement

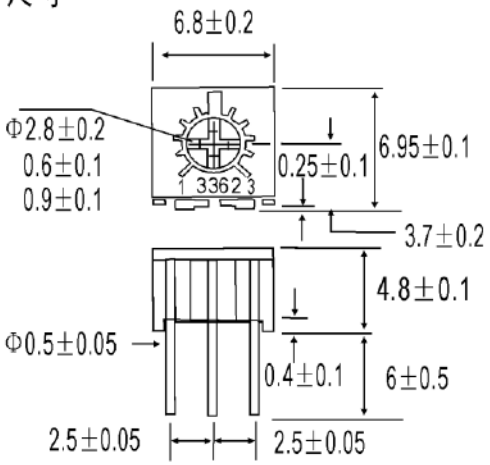
	Hold time for 30min at-55℃ Hold time (2-3) min at room temperature Hold time for 30min at + 125℃ Hold time (2-3) min at room temperature Recovery time was performed for 2h after the test appearance inspection output ratio Resistor resistance value	No visible damage $\triangle \frac{Uab}{Uac} \leq \pm 2\%$ $\triangle R \leq \pm(2\%R+0.1\Omega)$
4.43.2 Electrical Durability at 70℃	The voltage of half of the samples is added between a and c; the dynamic contact of the other half is adjusted at 95% of the total electrical stroke, and the voltage is added between a and b. Duration of 1,000 h Check at 48,500, and 1000h: appearance inspection The resistance value between a and c The resistance value between a and b Check after 1000h: insulation resistance Turn noise	No visible damage, with clear marks $\triangle R \leq \pm(5R+0.1\Omega)$ $\triangle R \leq \pm(5\%R+0.1\Omega)$ $\geq 1G\Omega$ 5 Ω or 3%R (take the larger)

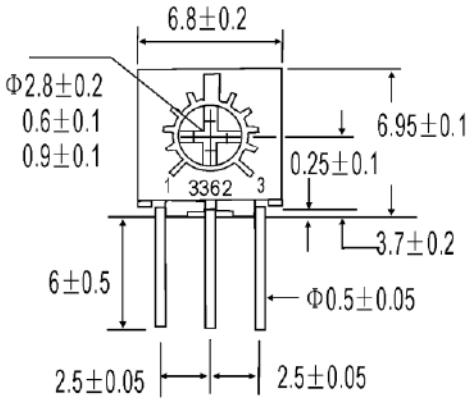
Continuation table 1

GB / T15298-94 bars Paragraph and test items	condition of experiment	performance requirement
4.40 Mechanical Durability	Number of weeks: 200 Dynamic contact speed: 5-10 weeks per minute appearance inspection Resistor resistance value Oversupport moment Turn noise	 No visible damage △R≤±3%R ≤35mN·m 5 Ω or 3%R (Take the big one)

附　录 A

共有尺寸





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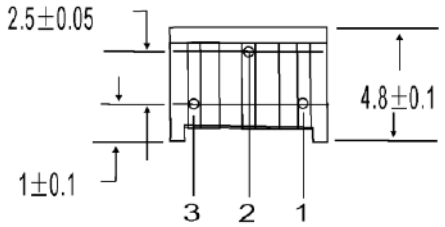

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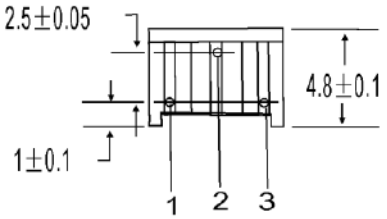

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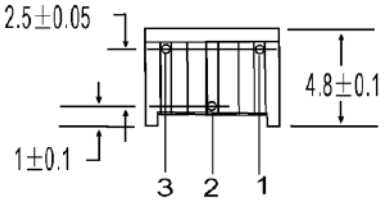

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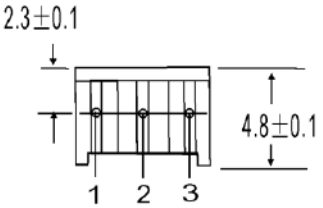

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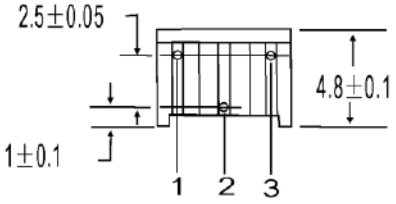


Note: Model 3362P can provide lead size: 3.5mm~4.0mm product

appendix B

Precautions for use

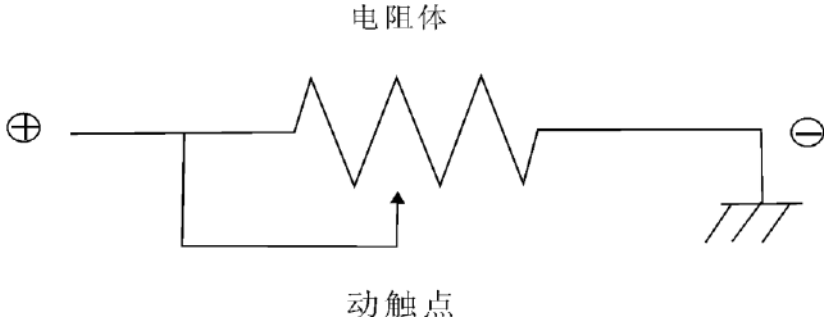
· Because the rated power of the potentiometer means that the specified rated power when the whole resistor is connected to the circuit is applicable. If only part of the resistor is connected to the circuit, the power is allowed to be reduced in the same proportion as the resistance value.

$$\text{P allowed power} = \frac{\text{R uses the impedance value}}{\text{R nominal candle-power}} \quad \text{P power rating}$$

Therefore, in order to make full use of the rated power of the potentiometer, it is suggested that when the potentiometer is used as a variable resistance, the resistance value used should be within 50%~90% of the nominal resistance value of the potentiometer.

· Eliminate anodic oxidation and prevent resistance value change

The potentiometer is used as a variable resistor (as an element at both ends). In DC operation, the anodic oxidation between the resistors and the moving contact may cause a change of the resistance value and drift. In order to effectively prevent this situation, please press the figure below to connect the moving contact of the potentiometer to the positive electrode of the circuit.



movable contact

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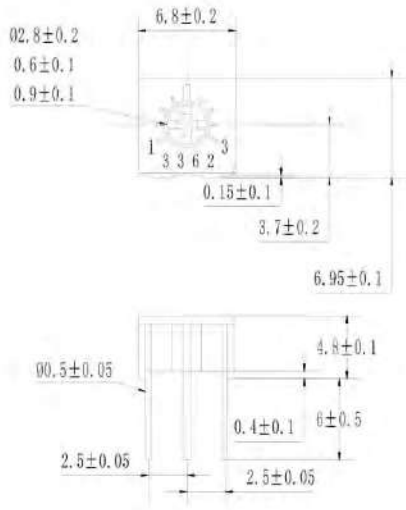
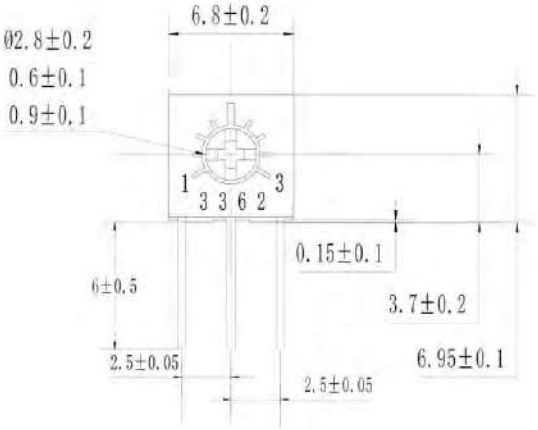
附录C





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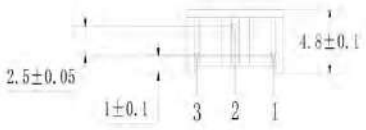

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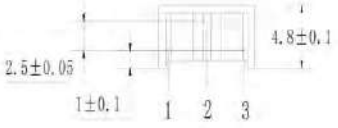

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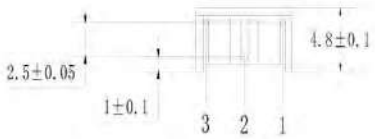

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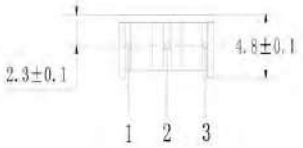

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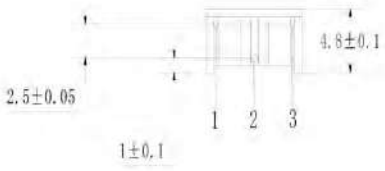

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