

**FEATURES**

- The pellet surface is quite stable physically and electrically by applying glassivation technique.
- Easy installation by its miniature size and thin electrode leads.
- less holding current distribution provides free application design.
- Low cost because of mass-production.

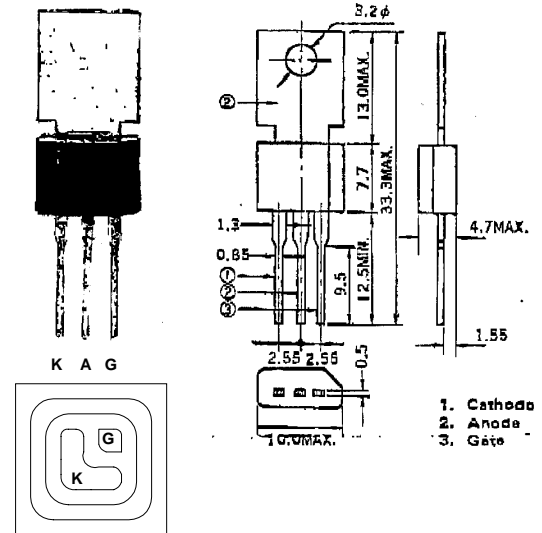
**APPLICATIONS**

Electric blanker, Electronic jar, Various temperature control.  
 Electric sewing machine, Speed control of miniature type motor.  
 Light display equipment, Lamp dimmer such as a display for entertainment.  
 Automatic gas lighter Battery charger.  
 Solid state static switches etc.

**MAXIMUM RATINGS**

Item	Symbol	2P4m	Unit	Note
Non-Repetitive Perk Reverse Voltage	V <sub>RSM</sub>	500	V	R <sub>GK</sub> = 1kΩ
Non-Repetitive Perk Off-state Voltage	V <sub>DSM</sub>	500	V	R <sub>GK</sub> = 1kΩ
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	400	V	R <sub>GK</sub> = 1kΩ
Repetitive Peak Off-state Voltage	V <sub>DRM</sub>	400	V	R <sub>GK</sub> = 1kΩ
On-state Current	I <sub>T(AV)</sub>	2(T <sub>C</sub> = 54°C, θ = 180° Single phase 1/2 wave)	A	
Surge Non-Repetitive On- state Current	I <sub>TSM</sub>	20	A	
Perk Gate Power Dissipation	P <sub>GM</sub>	0.5(f ≥ 50Hz, duty ≤ 10%)	W	
Average Gate Power Dissipation	P <sub>G(AV)</sub>	0.1	W	
Peak Gate Foward Current	I <sub>FGM</sub>	0.2(f ≥ 50Hz, duty ≤ 10%)	A	
Peak Gate Reverse Voltage	V <sub>RGM</sub>	6	V	
Junction Temperature	T <sub>j</sub>	-40 ~ +110	°C	
Storage Temperature	T <sub>stg</sub>	-40 ~ +150	°C	
Weight		1.4	g	

Outline Drawing (Unit: mm)

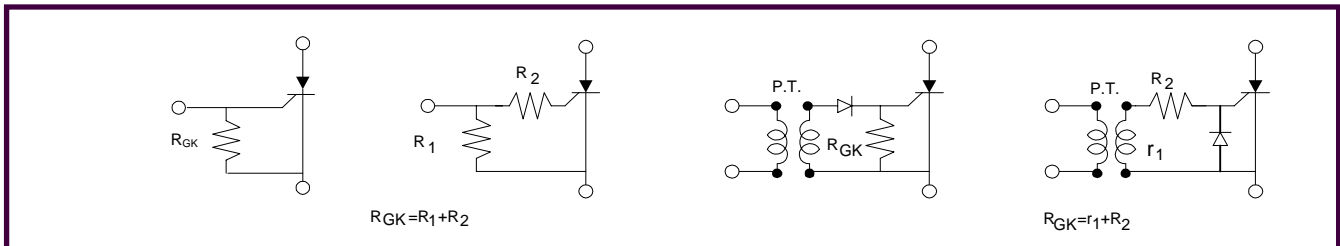


### ELECTRICAL CHARACTERISTICS (T<sub>j</sub> = 25°C)

Item	Symbol	Condition	Min	Typ.	Max.	Unit	Note
Repetitive Peak Reverse Current	IRRM	V <sub>RM</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 110°C P <sub>GK</sub> = 1kΩ	—	—	100	μA	
Repetitive Peak Off-state Current	IDRM	V <sub>DM</sub> = V <sub>VDRM</sub> , T <sub>j</sub> = 110°C R <sub>GK</sub> = 1kΩ	—	—	100	μA	
On-state Voltage	V <sub>TM</sub>	I <sub>TM</sub> = 4A	—	—	2.2	V	See Fig. 1
Gate-Trigger Current	IGT	V <sub>DM</sub> = V <sub>VDRM</sub> , T <sub>j</sub> = 110°C P <sub>GK</sub> = 1kΩ	—	—	200	μA	See Fig. 5 Fig.7
Gate-Trigger Voltage	V <sub>GT</sub>	V <sub>DM</sub> = 6V, R <sub>L</sub> = 100 R <sub>GK</sub> = 1kΩ	—	—	0.8	V	See Fig.6 Fig. 8
Gate Non-Trigger Voltage	V <sub>GD</sub>	V <sub>DM</sub> = 1/2 V <sub>VDRM</sub> , T <sub>j</sub> = 110°C R <sub>L</sub> = 100Ω, R <sub>GK</sub> = 1kΩ	0.2	—	—	V	
Critical Rate-of-Rise of Off-state Voltage	dv/dt	V <sub>DM</sub> = V <sub>VDRM</sub> , T <sub>j</sub> = 110°C R <sub>GK</sub> = 1kΩ	10	1	—	V/μs	2P5M, 2P6M
Holding Current	I <sub>H</sub>	V <sub>D</sub> = 24V, R <sub>GK</sub> = 1kΩ I <sub>ON</sub> = 40 mA (t = 10 ms)	—	1	3	mA	See Fig.9
Thermal Resistance	R <sub>th</sub> (j-c)	Junction to Case	—	—	10	°C/W	See Fig. 11
	R <sub>th</sub> (j-a)	Junction to Ambient	—	—	75		See Fig.11

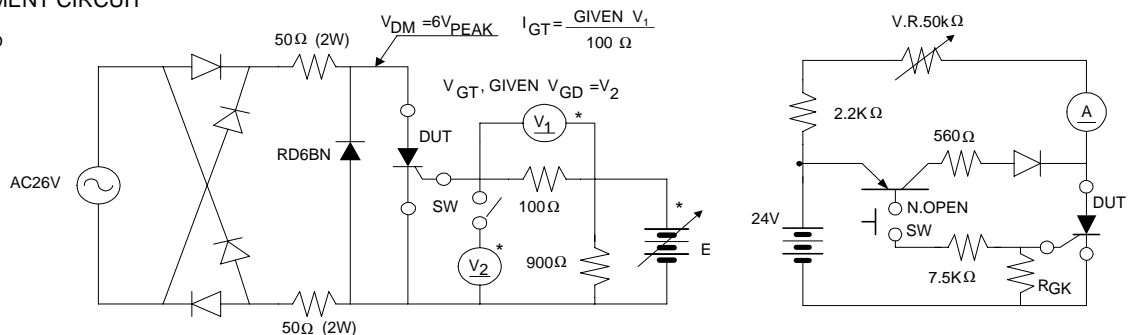
\*\*Note: insert a resistance less than 1kΩ between gate and cathode, because the items indicated are guaranteed by connecting short resistance between gate and cathode(R<sub>GK</sub>=1kΩ)

### EXAMPLE OF R<sub>GK</sub> INSERTION



### MEASUREMENT CIRCUIT

I<sub>GT</sub>, V<sub>GT</sub>, V<sub>CD</sub>



V<sub>1</sub>: more than 100kΩ at I<sub>GT</sub> = 10μA

V<sub>2</sub>: more than 1MΩ SW

\*INNER RESISTANCE E : more than 20 kΩ