2P4M

GLASS PASSIVATED 2A(4Arms)MOLD THYRISTOR

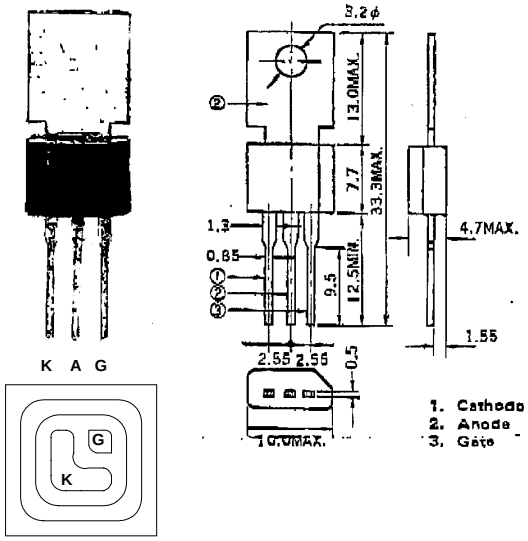
FEATURES

- 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.

Outline Drawing (Unit: mm)



MAXIMUM RATINGS

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

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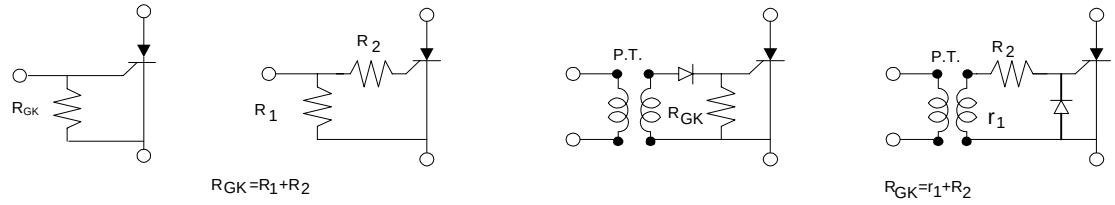
ELECTRICAL CHARACTERISTICS (Tj = 25℃)

Item	Symbol	Condition	Min	Typ.	Max.	Unit	Note
Repetitive Peak Reverse Current	IRRM	VRM =VRRM,Tj =110℃ PGK = 1kΩ	—	—	100	μA	
Repetitive Peak Off-state Current	IDRM	VDM = VDRM,Tj = 110℃ RGK = 1kΩ	—	—	100	μA	
On-state Voltage	VTM	ITM = 4A	—	—	2.2	V	See Fig. 1
Gate-Trigger Current	IGT	VDM = VDRM,Tj = 110℃ PGK = 1kΩ	—	—	200	μA	See Fig. 5 Fig.7
Gate-Trigger Voltage	VGT	VDM = 6V, RL =100 RGK = 1kΩ	—	—	0.8	V	See Fig.6 Fig. 8
Gate Non-Trigger Voltage	VGD	VDM = 1/2 VDRM, Tj = 110℃ RL = 100Ω, RGK = 1kΩ	0.2	—	—	V	
Critical Tate-of-Rise of Off-state Voltage	dv/dt	VDM = VDRM, Tj = 110℃ RGK = 1kΩ	10	1	—	V/μs	2P5M, 2P6M
Holding Current	IH	VD = 24V, RGK = 1kΩ ION = 40 mA (t = 10 ms)	—	1	3	mA	See Fig.9
Thermal Resistance	Rth (j-c)	Junction to Case	—	—	10	℃/W	See Fig. 11
	Rth (j-a)	Junction to Ambient	—	—	75		See Fig.11

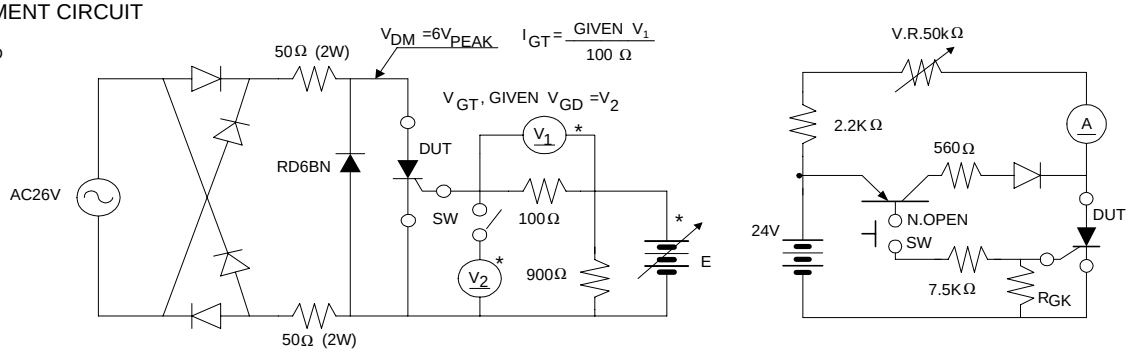
**Note: insert a resistance less than 1kΩ between gate and cathode, because the items indicated are quaranteed by connecting short resistance between gate and cathode(R_{GK} =1kΩ)

EXAMPLE OF R_{GK} INSERTION



MEASUREMENT CIRCUIT

I_{GT},V_{GT},V_{CD}



V1:more than 100kΩ at 1_{GT} =10μA

V_2:more than 1MΩ SW

*INNER RESISTANANCE E :more than 20 kΩ

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