

S6370

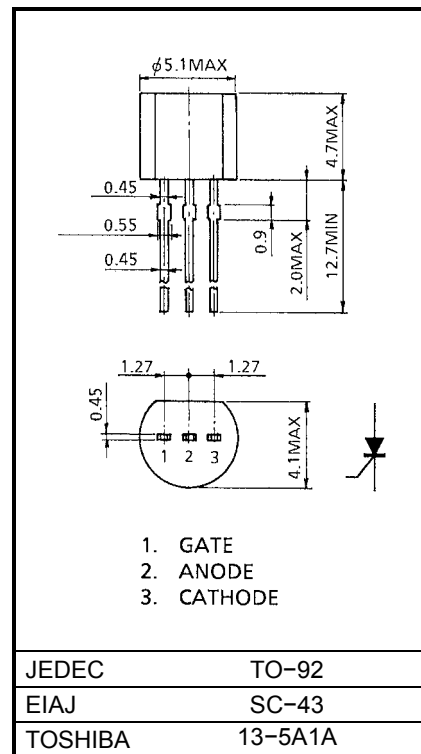
Unit in mm

LOW POWER SWITCHING APPLICATIONS (STROBE TRIGGER)

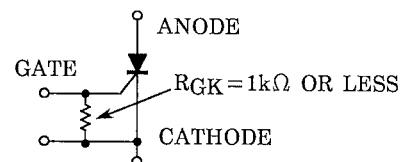
- Repetitive Peak Off-State Voltage : $V_{DRM} = 400V$
- Repetitive Peak Reverse Voltage : $V_{RRM} = 400V$
- Fast Turn On Time : $t_{gt} = 1.5\mu s$
- Plastic Mold Package (TO-92)

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage ($R_{GK}=1k\Omega$)	V_{DRM} V_{RRM}	400	V
Non-Repetitive Peak Reverse Voltage (Non-rep<5ms, $R_{GK}=1k\Omega$, $T_j=0\sim 125^\circ C$)	V_{RSM}	450	V
Average On-State Current (Half Sine Waveform $T_a=45^\circ C$)	$I_T (AV)$	300	mA
R.M.S. On-State Current	$I_T (RMS)$	450	mW
Peak One Cycle Surge On-State Current (Non-Repetitive)	I_{TSM}	9 (50Hz)	A
		9.9 (60Hz)	
Peak Gate Power Dissipation	P_{GM}	0.1	W
Average Gate Power Dissipation	$P_G (AV)$	0.01	W
Peak Reverse Gate Voltage	V_{RGM}	-5	V
Peak Forward Gate Current	I_{GM}	125	mA
Junction Temperature	T_j	-40~125	$^\circ C$
Storage Temperature Range	T_{stg}	-40~125	$^\circ C$



Note : Use with gate resistance by all means



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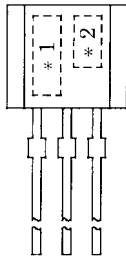
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ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Repetitive Peak Off-State Current and Repetitive Peak Reverse Current	I_{DRM} I_{RRM}	$V_{DRM} = V_{RRM} = 400V$ $R_{GK} = 1k\Omega$	—	—	10	μA
Peak On-State Voltage	V_{TM}	$I_{TM} = 2A$	—	—	2.0	V
Gate Trigger Voltage	V_{GT}	$V_D = 6V, R_L = 100\Omega, R_{GK} = 1k\Omega$	—	—	0.8	V
Gate Trigger Current	I_{GT}		—	—	200	μA
Turn On Time	t_{gt}	$V_D = 400V, i_G = 5mA$	—	—	1.5	μs
Gate Non-Trigger Voltage	V_{GD}	$V_D = 6V, R_{GK} = 1k\Omega$	0.2	—	—	V
Holding Current	I_H	$R_L = 100\Omega, R_{GK} = 1k\Omega$	—	4	—	mA
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient	—	—	250	$^{\circ}C / W$

MARKING

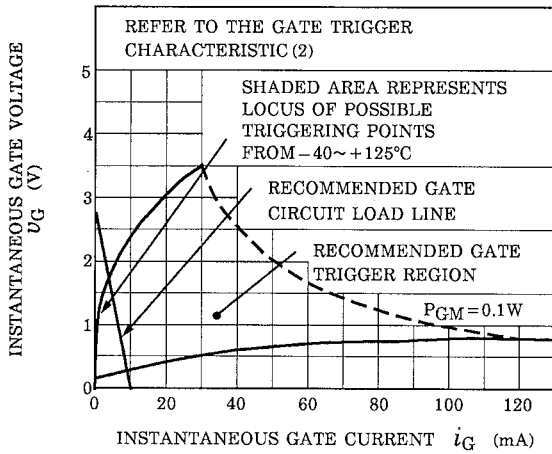


NUMBER	SYMBOL		MARK
*1	TYPE	S6370	S6370
*2	Lot Number Month (Starting from Alphabet A) Year (Last Decimal Digit of the Year of Manufacture)		Example 8A : January 1998 8B : February 1998 8L : December 1998

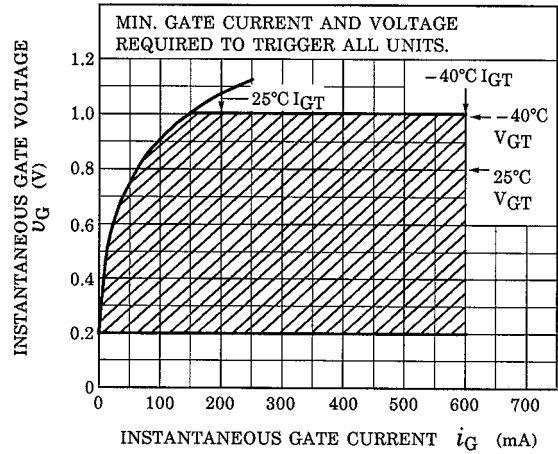
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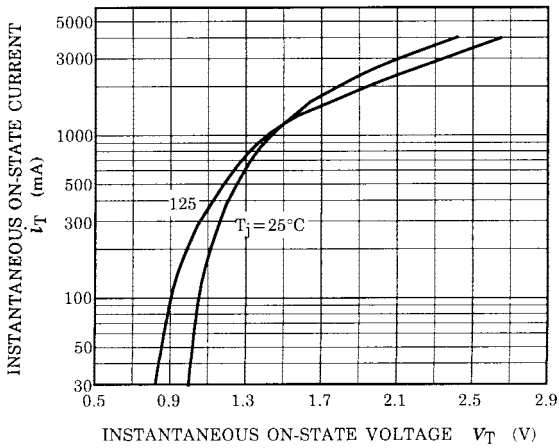
GATE TRIGGER CHARACTERISTIC (1)



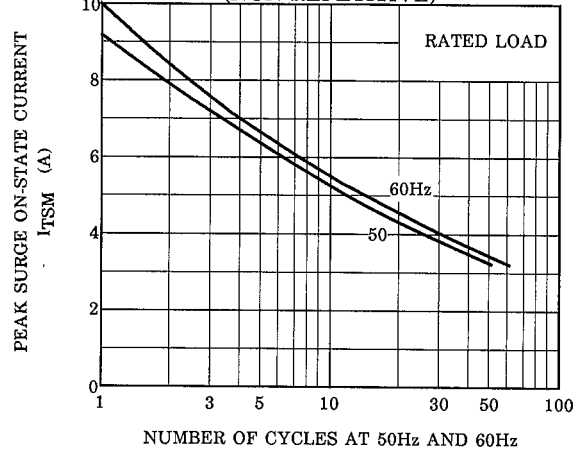
GATE TRIGGER CHARACTERISTIC (1)



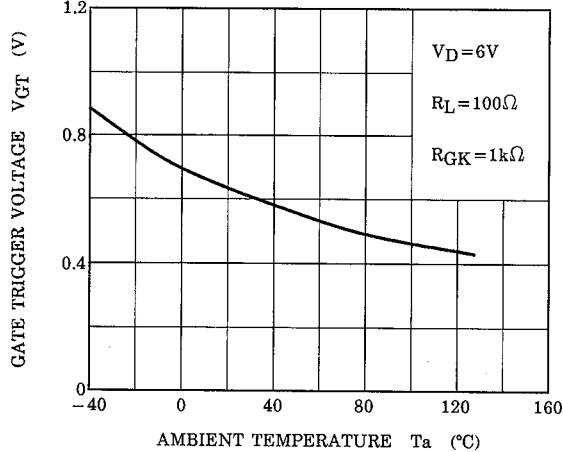
$i_T - v_T$



SURGE ON-STATE CURRENT (NON-REPETITIVE)



$v_{GT} - T_a$ (TYPICAL)



$i_{GT} - T_a$ (TYPICAL)

