TOSHIBA THYRISTOR SILICON PLANAR TYPE

S6370

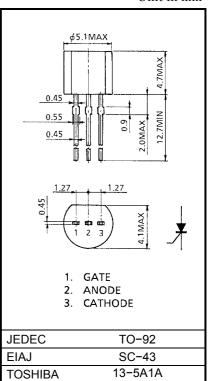
LOW POWER SWITCHING APPLICATIONS (STROBE TRIGGER)

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

MAXIMUM RATINGS

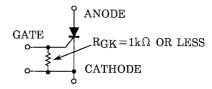
CHARACTERISTIC	SYMBOL	RATING	UNIT	
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage $(R_{GK}=1k\Omega)$	V _{DRM} V _{RRM}	400	V	
Non-Repetitive Peak Reverse Voltage (Non-rep<5ms, R _{GK} =1kΩ, Tj=0~125°C)	V _{RSM}	450	V	
Average On-State Current	I=	300	mA	
(Half Sine Waveform Ta=45°C)	I _{T (AV)}	300		
R.M.S. On-State Current	I _{T (RMS)}	450	mW	
Peak One Cycle Surge On-State Current (Non-Repetitive)	ITSM	9 (50Hz)	А	
		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	Тj	-40~125	°C	
Storage Temperature Range	T _{stg}	-40~125	°C	

 $t_{gt} = 1.5 \mu s$



Weight : 0.2 g

Note : Use with gate resistance by all means



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can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the
buyer, when utilizing TOSHIBA products, to comply with the standards of safety in making a safe design for the entire system, and
to avoid situations in which a malfunction or failure of such TOSHIBA products could cause loss of human life, bodily injury or
damage to property.

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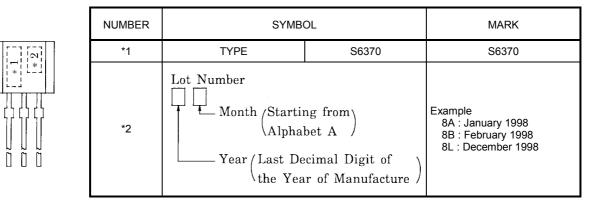
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Unit in mm

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} = 1kΩ	_	_	10	μA
Peak On-State Voltage	V _{TM}	I _{TM} = 2A	_		2.0	V
Gate Trigger Voltage	V _{GT}	V _D = 6V, R _I = 100Ω, R _{GK} = 1kΩ	_	_	0.8	V
Gate Trigger Current	I _{GT}	$v_{\rm D} = 0v, \kappa_{\rm L} = 100s_2, \kappa_{\rm GK} = 1\kappa_{s_2}$	_		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	Ι _Η	R _L = 100Ω, R _{GK} = 1kΩ	_	4	_	mA
Thermal Resistance	R _{th (j−a)}	Junction to Ambient	_	_	250	°C/W

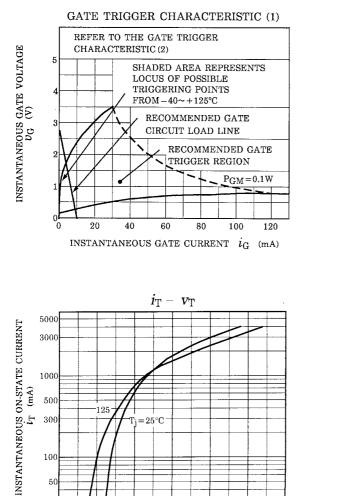
MARKING

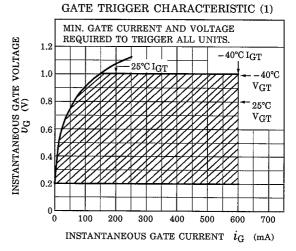


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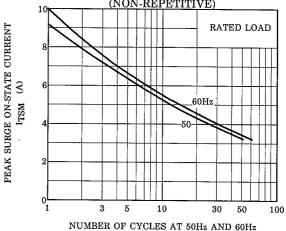
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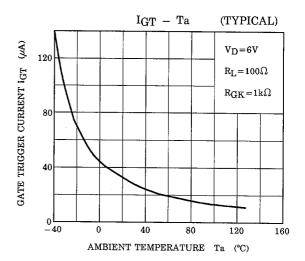
The information contained herein is subject to change without notice.





SURGE ON-STATE CURRENT (NON-REPETITIVE)





100 50 30L 0.5 0.9 1.3 1.7 2.12.92.5INSTANTANEOUS ON-STATE VOLTAGE V_{T} (V) VGT - Ta (TYPICAL) 1.2Ξ $V_D = 6V$ v_{GT} $R_L = 100\Omega$ 0.8 GATE TRIGGER VOLTAGE $R_{GK} = 1k\Omega$ 0.4

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AMBIENT TEMPERATURE Ta (°C)

80

120

160

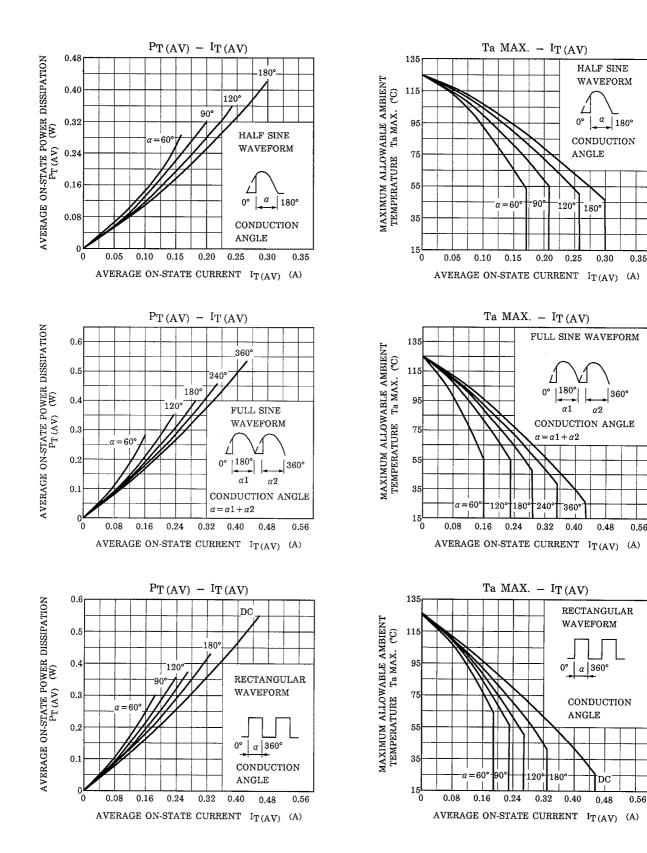
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