TOSHIBA HIGH-SPEED THYRISTOR SILICON PLANAR TYPE

SH8G41

FOR AUTOMATIC-STROBE FLASHER APPLICATIONS --- DISCHARGER (Chopper)

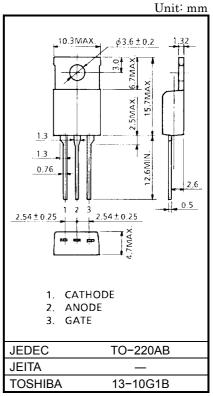
- Type No. SH8G41 is Designed for a Small Package Device Having ShortedTurn-Off Time and Low Turn-On Loss at High Current.
- Repetitive Peak Off-State Voltage and Peak Reverse Voltage
 V_{DRM} = V_{RRM} = 400V
- Repetitive Peak Surge On-State Current : I_{TRM} = 350A
- Critical Rate of Rise of On-State Current : di/dt = 100A/µs
- Plastic Mold Package

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Off-State and Reverse Voltage	$V_{ m DRM} \ V_{ m RRM}$	400	V
Non-Repetitive Peak Reverse Voltage (Note 1)	V _{RSM}	450	V
Repetitive Peak Surge On-State Current (Note 2)	I _{TRM}	350	А
Critical Rate of Rise of On-State Current (Note 3)	di /dt	100	A / µs
Peak Gate Power Dissipation	P _{GM}	5	W
Average Gate Power Dissipation	P _{G (AV)}	0.5	W
Peak Forward Gate Current	I _{GM}	2	Α
Junction Temperature	Tj	-40~125	°C
Storage Temperature Range	T _{stg}	-40~125	°C

Note 1: Non – Rep. < 5ms, $T_j = 0~125$ °C

Note 2: $C_M = 1000 \mu F$ Note 3: $i_G = 100 mA$ $t_{gw} = 10 \mu s$ $t_{qr} \le 250 ns$

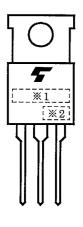


Weight: 2.0g

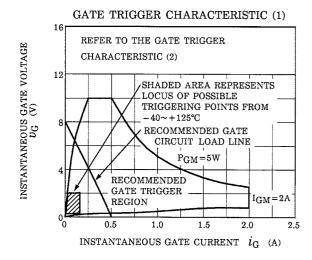
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

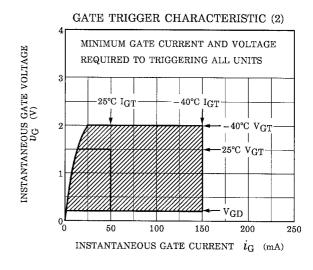
CHARACTERISTIC	SYMBOL	TEST CONDITION		MAX	UNIT
Repetitive Peak Off-State and Reverse Current	I _{DRM} I _{RRM}	V _{DRM} = V _{RRM} = 400V		250	μA
Peak On-State Voltage	V _{TM}	I _{TM} = 25A		2.3	V
Gate Trigger Voltage	V _{GT}	$V_D = 6V, R_I = 10\Omega$	_	1.5	V
Gate Trigger Current	I _{GT}	v _D = 0v, r _L = 1002	_	50	mA
Gate Non-Trigger Voltage	V_{GD}	V _D = 200V, Ta = 125°C	0.2	_	V
Holding Current	lΗ	R _L = 100Ω	_	150	mA
Commutating Capacitor	C _c	C _M = 1000μF, V _{CM} = 350V, I _{TM} = 230A L _M = 50μH, V _{GR} = -6V		2.7	μF
Thermal Resistance	R _{th (j−a)}	Junction to Ambient		90	°C/W

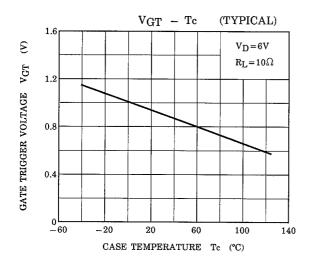
MARKING

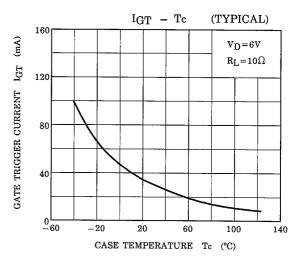


NUMBER	SYMBOL		MARK
*1	TYPE	SH8G41	SH8G41
*2	Lot Number		Example 8A : January 1998 8B : February 1998 8L : December 1998

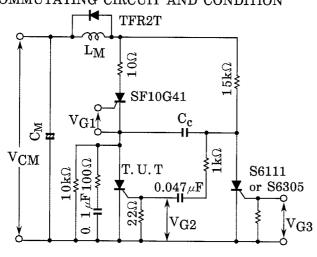


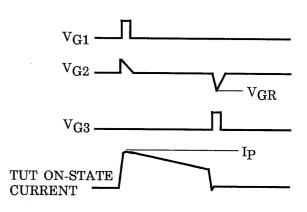




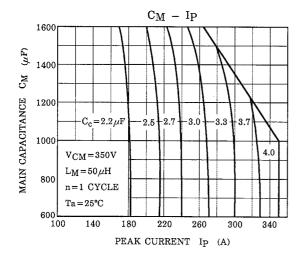


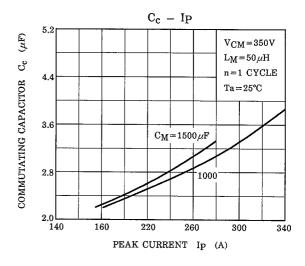
COMMUTATING CIRCUIT AND CONDITION

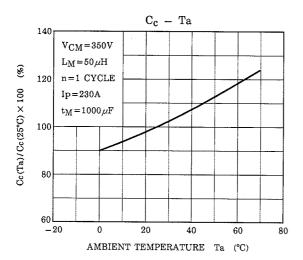


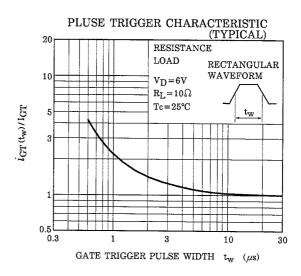


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