

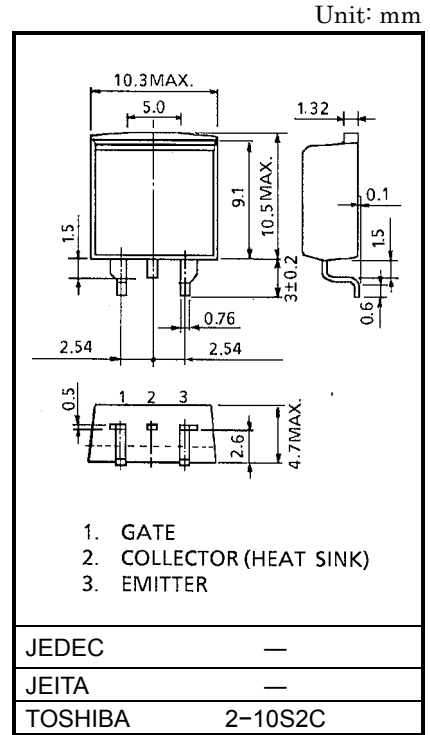
# GT25G102(SM)

## STROBE FLASH APPLICATIONS

- High Input Impedance
- Low Saturation Voltage:  $V_{CE(sat)} = 8V$  (Max.) ( $I_C = 150A$ )
- Enhancement-Mode
- 12V Gate Drive

## MAXIMUM RATINGS ( $T_a = 25^\circ C$ )

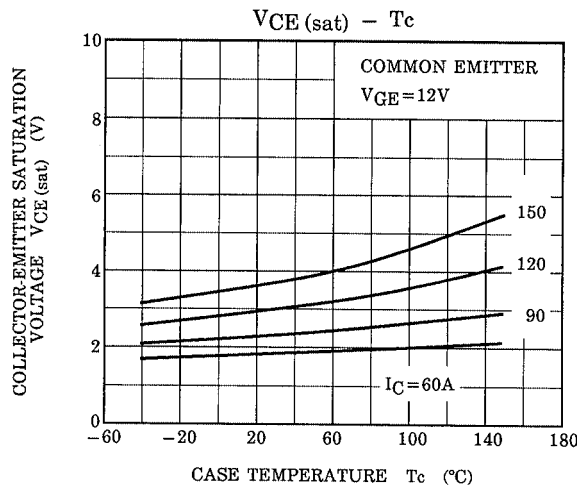
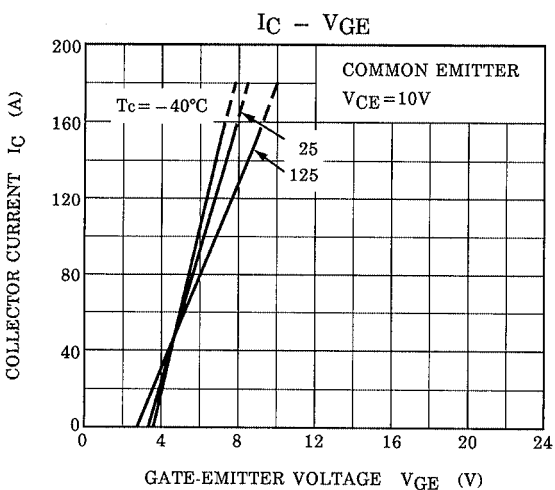
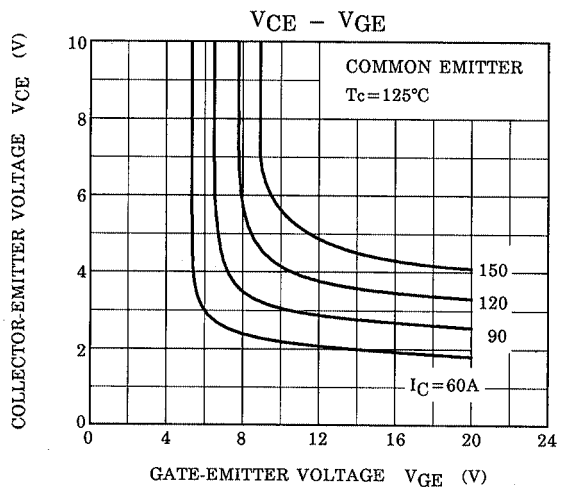
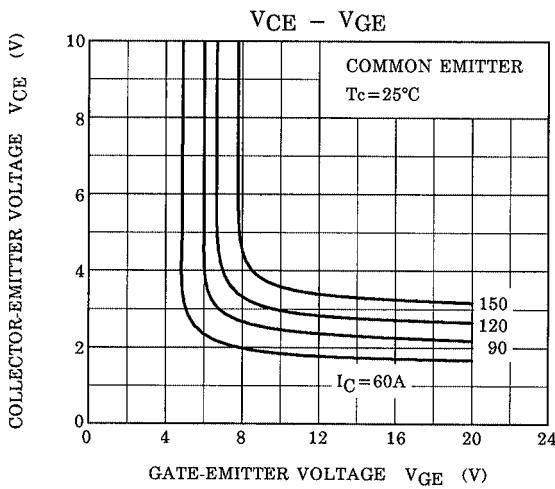
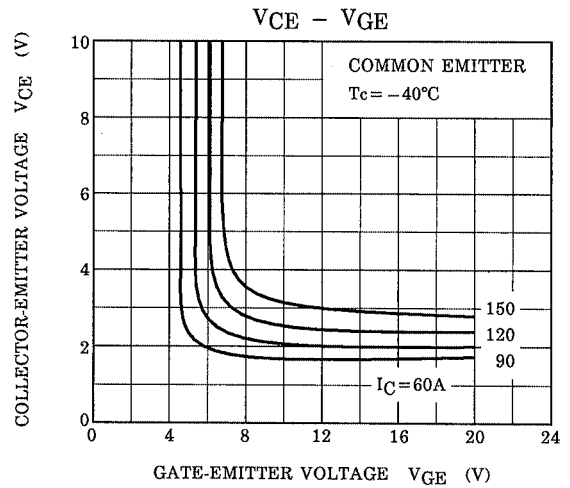
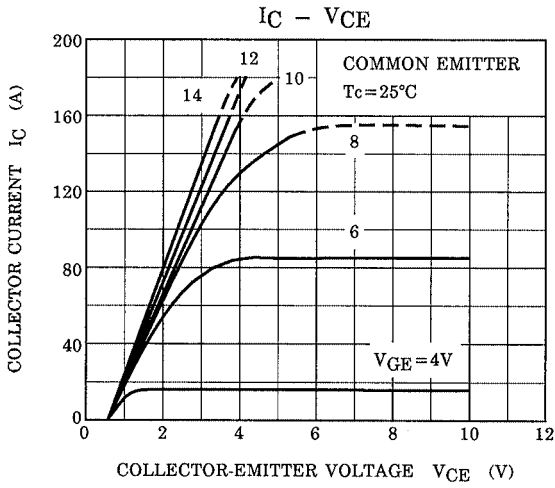
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Emitter Voltage		$V_{CES}$	400	V
Gate-Emitter Voltage		$V_{GES}$	$\pm 20$	V
Collector Current	DC	$I_C$	25	A
	1ms	$I_{CP}$	150	
Collector Power Dissipation	$T_a = 25^\circ C$	$P_C$	1.3	A
	$T_c = 25^\circ C$	$P_C$	75	
Junction Temperature		$T_j$	150	$^\circ C$
Storage Temperature Range		$T_{stg}$	-55~150	$^\circ C$

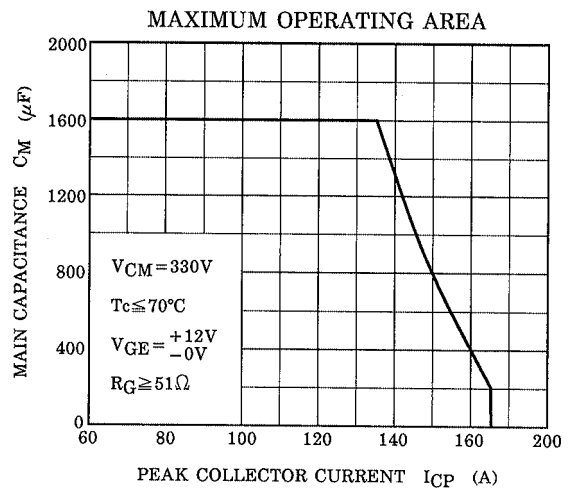
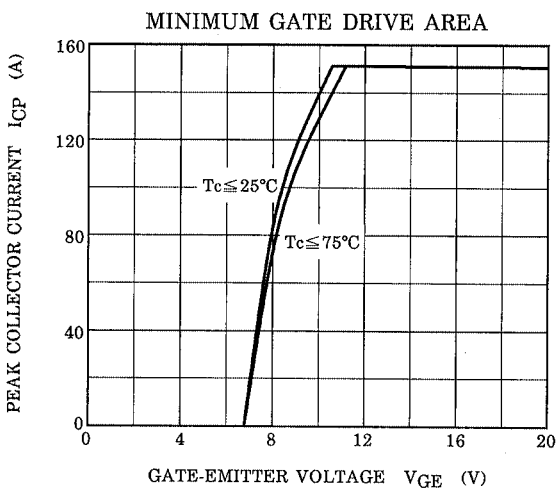
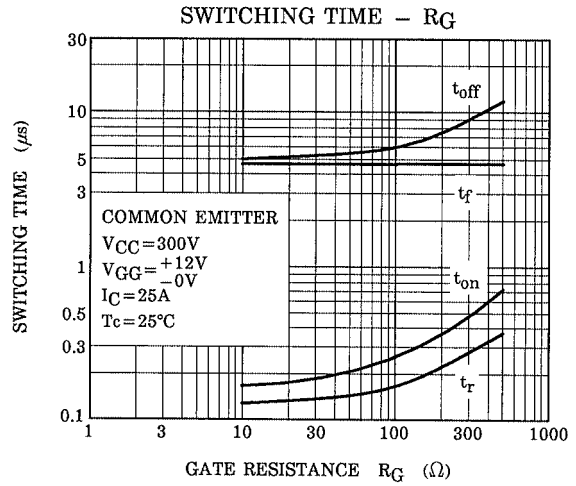
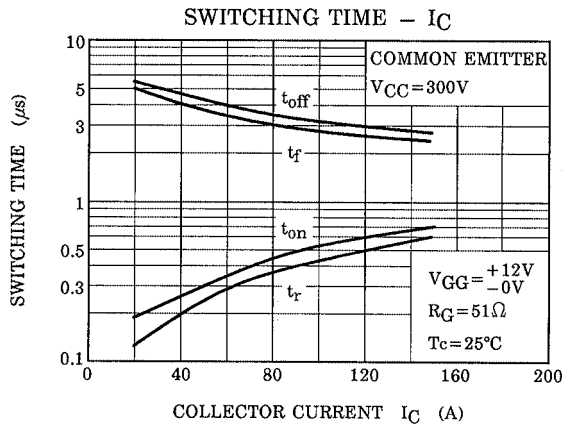
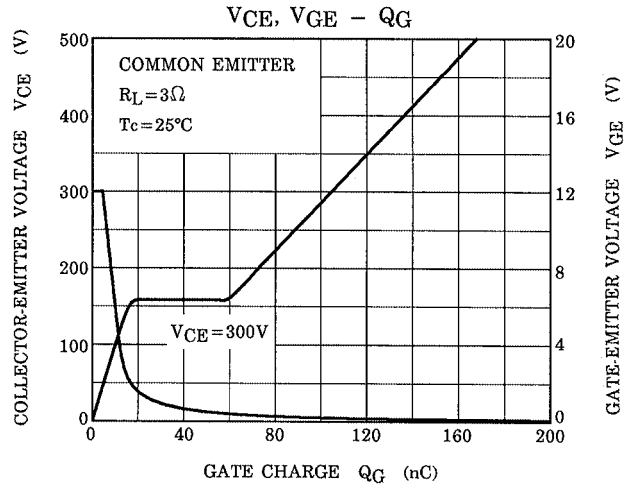
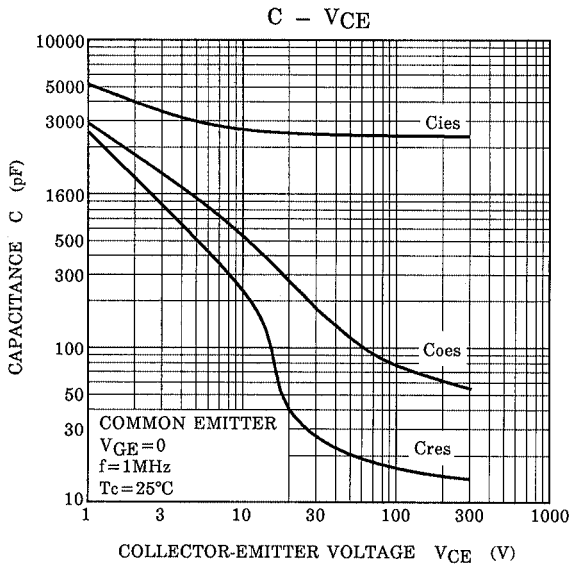


Weight: 1.4g

## ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Gate Leakage Current		$I_{GES}$	$V_{GE} = \pm 20V, V_{CE} = 0$	—	—	$\pm 100$	nA
Collector Cut-off Current		$I_{CES}$	$V_{CE} = 400V, V_{GE} = 0$	—	—	10	$\mu A$
Gate-Emitter Cut-off Voltage		$V_{GE(OFF)}$	$I_C = 1mA, V_{CE} = 5V$	2	—	5	V
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = 150A, V_{GE} = 12V$ (Pulsed)	—	4	8	V
Input Capacitance		$C_{ies}$	$V_{CE} = 10V, V_{GE} = 0, f = 1MHz$	—	2600	—	pF
Switching Time	Rise Time	$t_r$	 $V_{IN} : t_r \leq 100ns$ $t_f \leq 100ns$ Duty cycle $\leq 1\%$	—	0.1	0.5	$\mu s$
	Turn-on Time	$t_{on}$		—	0.15	0.5	
	Fall Time	$t_f$		—	4.0	6.0	
	Turn-off Time	$t_{off}$		—	4.5	7.0	
Thermal Resistance		$R_{th(j-c)}$	—	—	—	1.66	$^\circ C / W$





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