

GT25Q101

HIGH POWER SWITCHING APPLICATIONS

MOTOR CONTROL APPLICATIONS

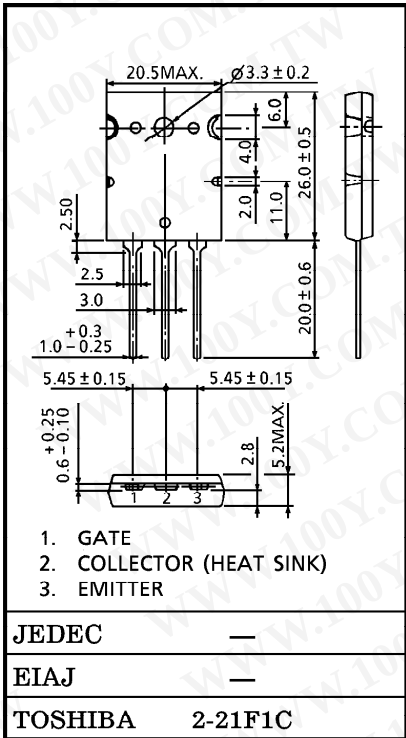
- High Input Impedance
- High Speed : $t_f = 0.5\mu s$ (Max.)
- Low Saturation Voltage : $V_{CE(sat)} = 4.0V$ (Max.)
- Enhancement-Mode

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CES}	1200	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	DC	25	A
	1ms	50	
Collector Power Dissipation ($T_c = 25^\circ C$)	P_C	200	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ C$

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Unit in mm



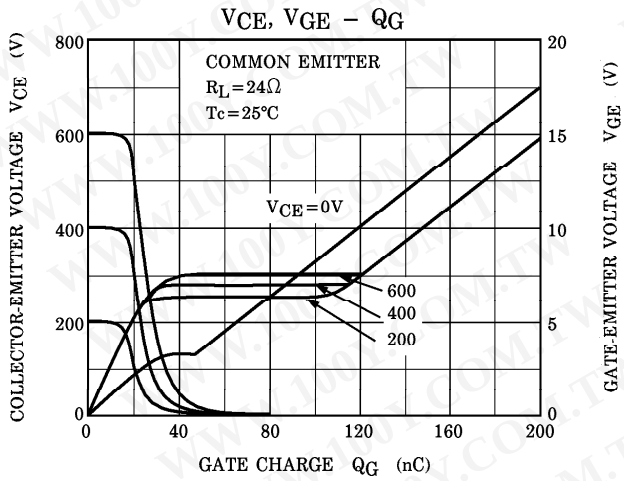
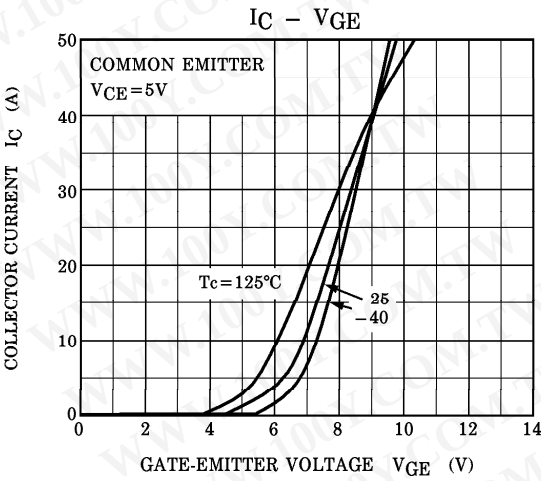
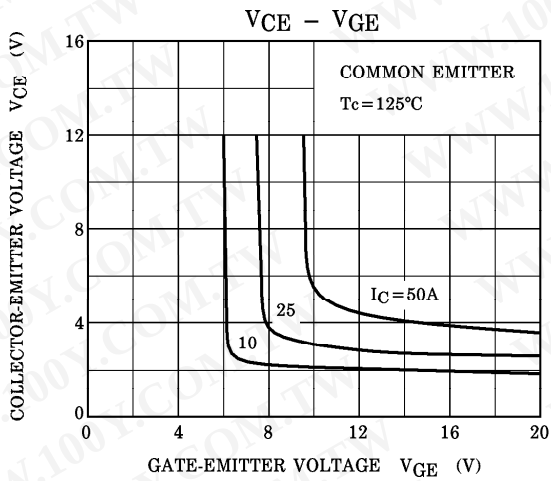
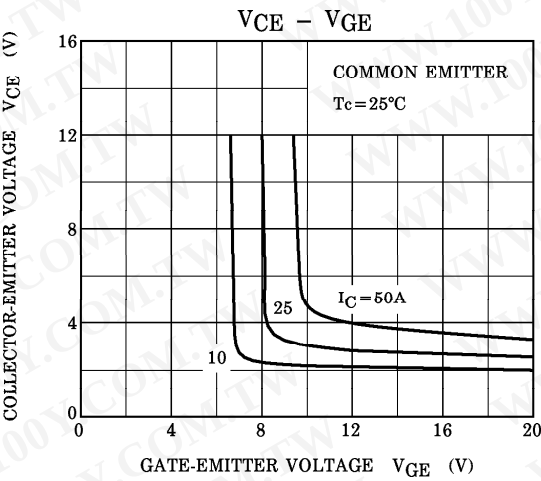
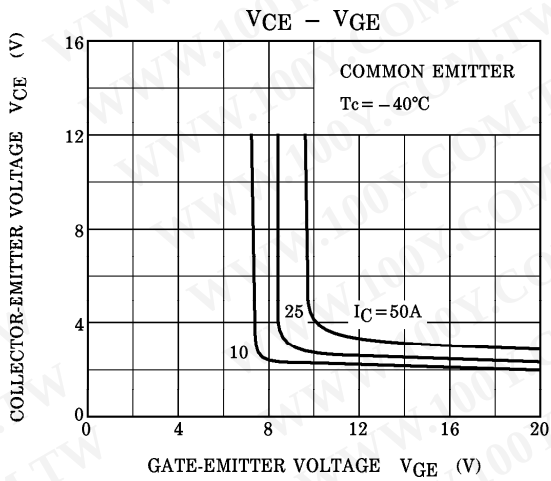
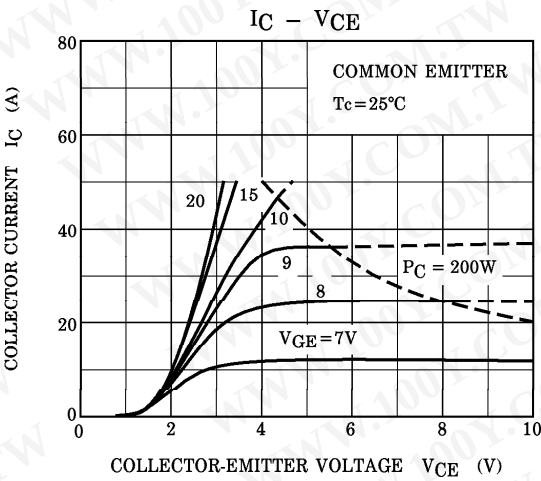
JEDEC —
 EIAJ —
 TOSHIBA 2-21F1C
 Weight : 9.75g

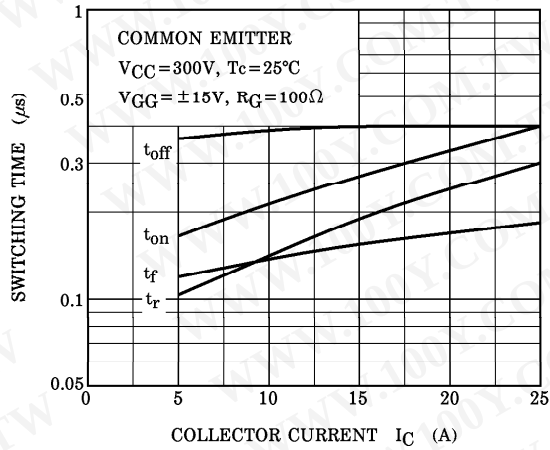
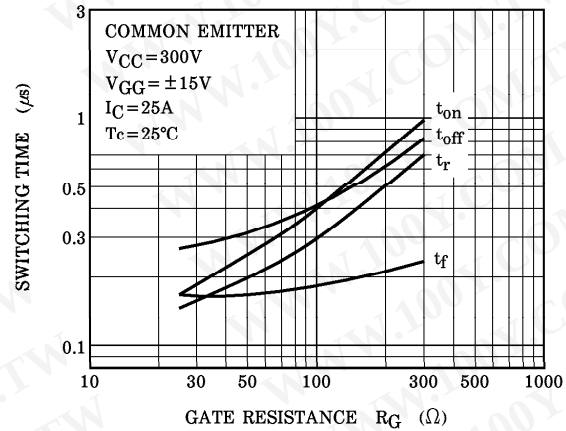
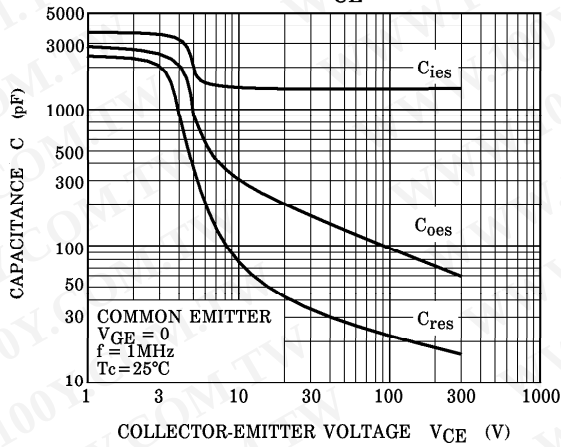
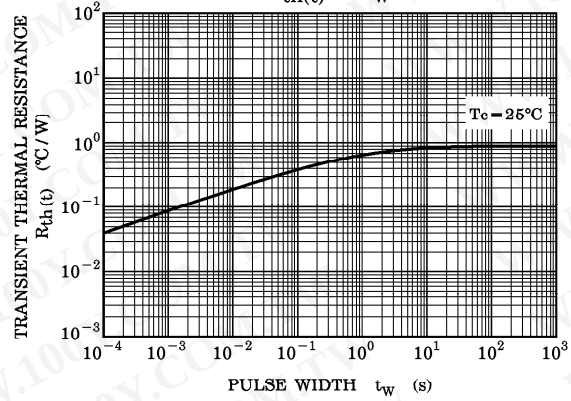
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate Leakage Current	I_{GES}	$V_{GE} = \pm 20V, V_{CE} = 0$	—	—	± 500	nA
Collector Cut-off Current	I_{CES}	$V_{CE} = 1200V, V_{GE} = 0$	—	—	1.0	mA
Gate-Emitter Cut-off Voltage	$V_{GE(OFF)}$	$I_C = 25mA, V_{CE} = 5V$	3.0	—	6.0	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 25A, V_{GE} = 15V$	—	3.0	4.0	V
Input Capacitance	C_{ies}	$V_{CE} = 10V, V_{GE} = 0, f = 1MHz$	—	3200	—	pF
Switching Time	Rise Time		—	0.2	0.6	μs
	Turn-on Time		—	0.3	0.8	
	Fall Time		—	0.3	0.5	
	Turn-off Time		—	0.8	1.5	

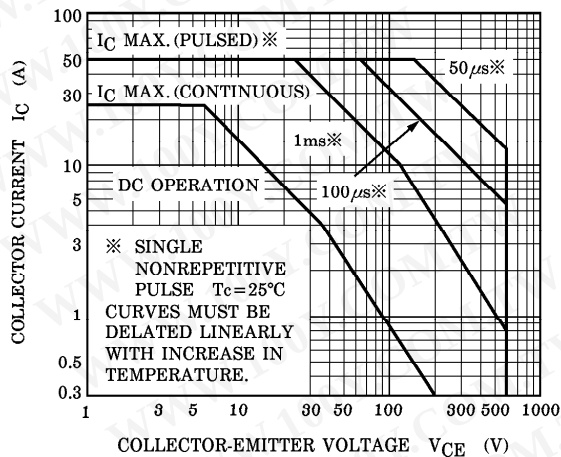
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SWITCHING TIME - I_C SWITCHING TIME - R_G C - V_{CE}  $R_{th}(t) - t_w$ 

SAFE OPERATING AREA



REVERSE BIAS SOA

