

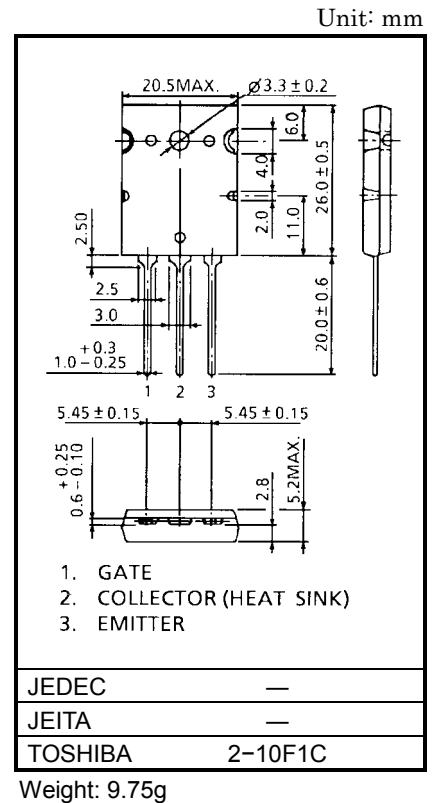
GT80J101

HIGH POWER SWITCHING APPLICATIONS

- High Input Impedance
- High Speed : $t_f = 0.40\mu s$ (Max.)
- Low Saturation Voltage : $V_{CE(sat)} = 3.5V$ (Max.)
- Enhancement-Mode

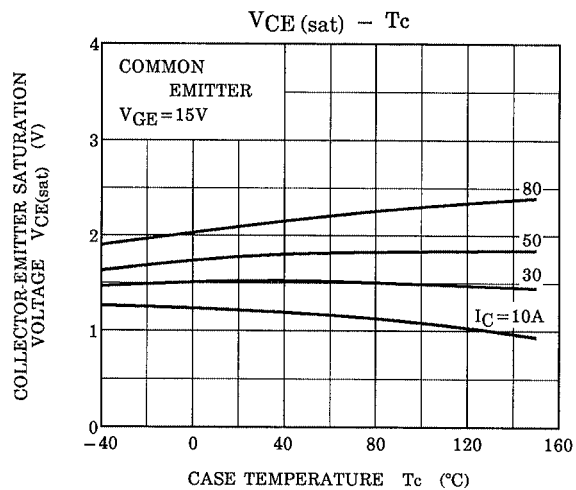
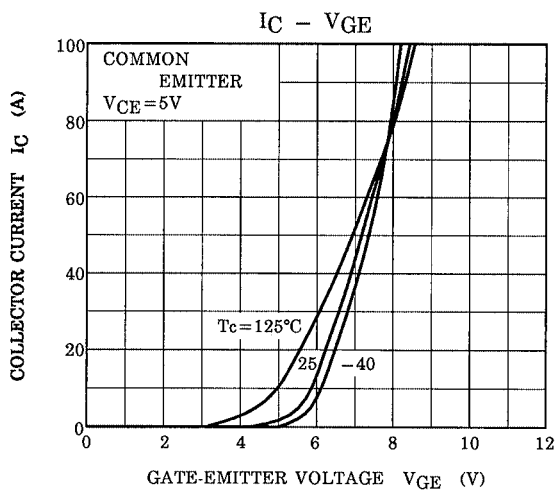
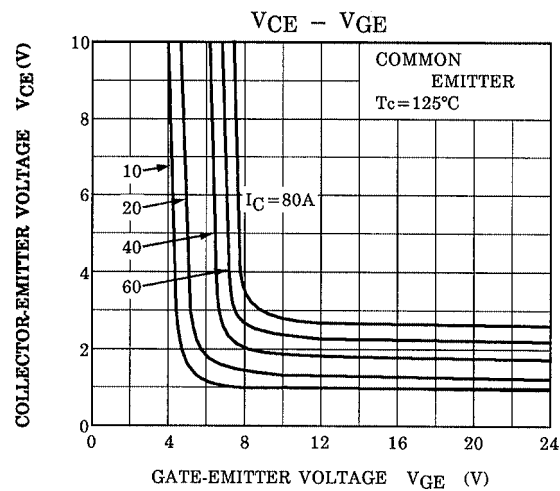
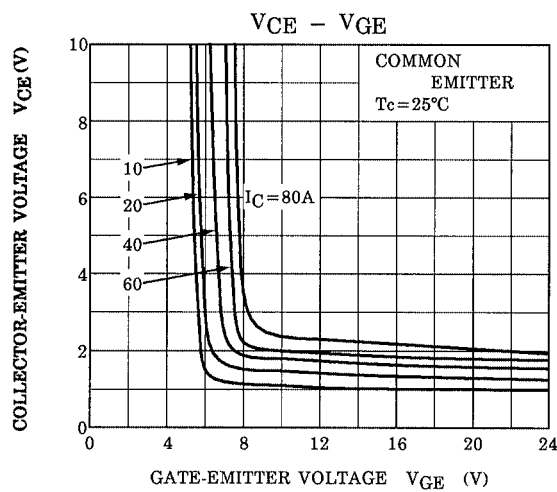
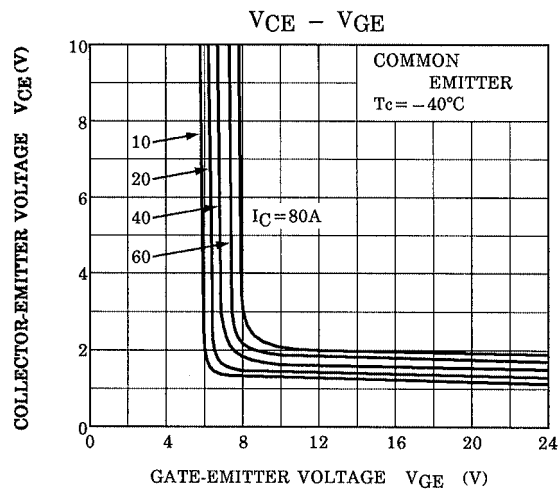
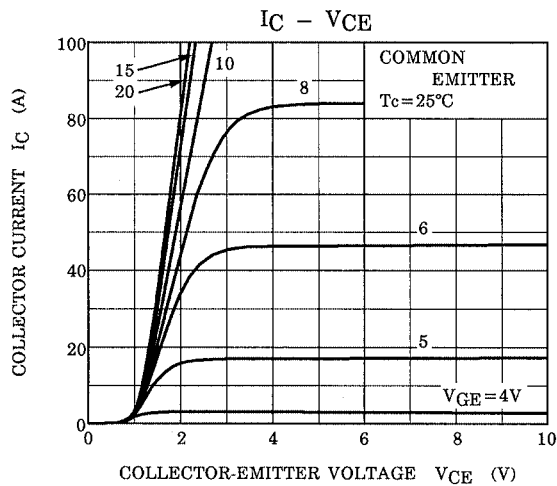
MAXIMUM RATINGS ($T_a = 25^\circ C$)

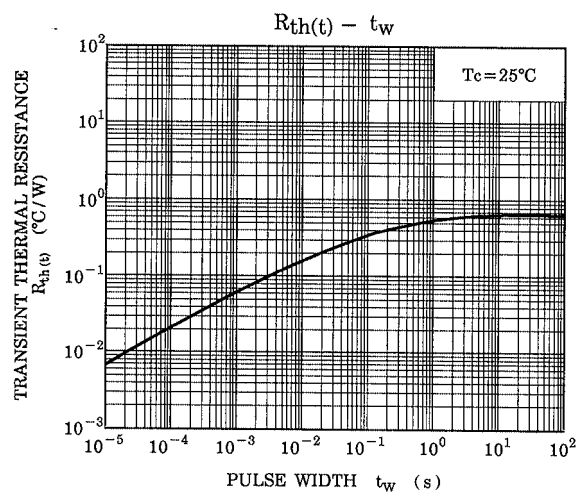
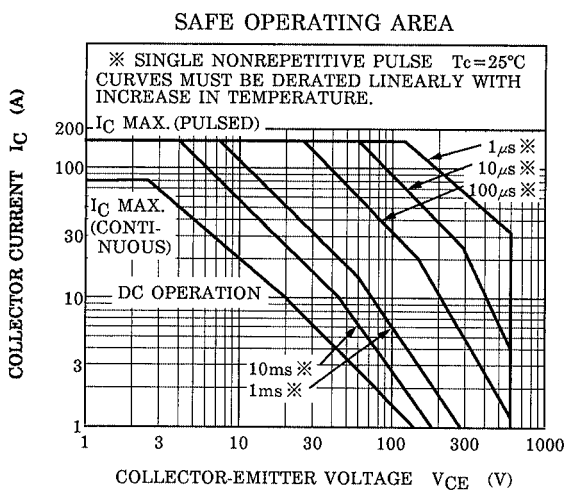
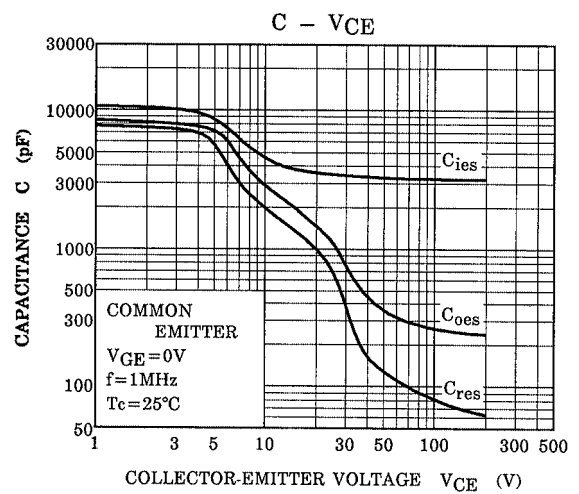
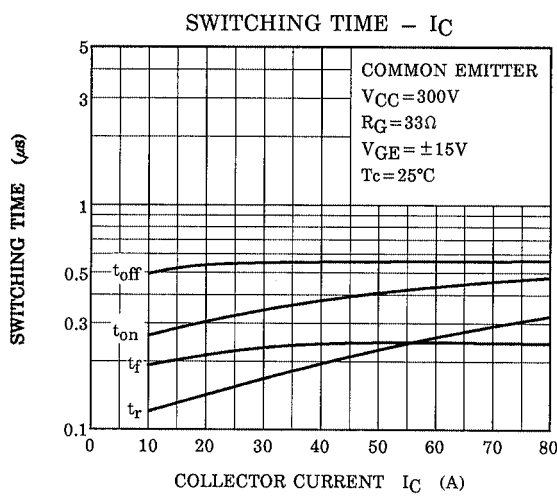
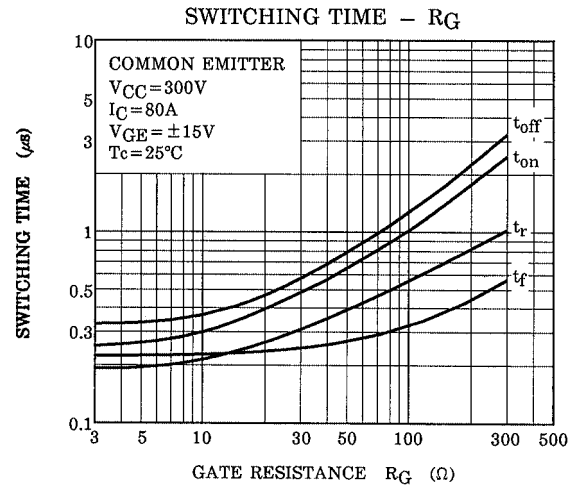
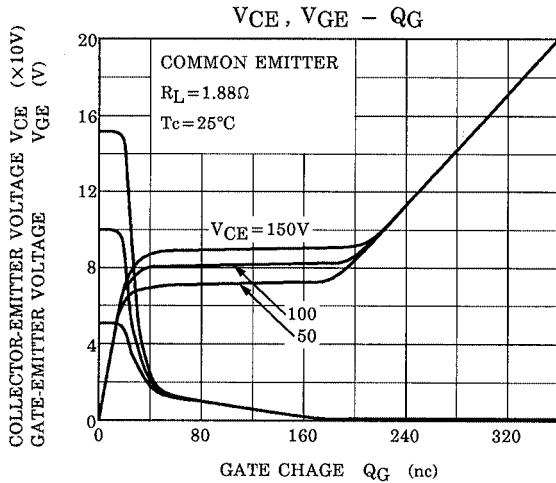
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CES}	600	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	DC	I_C	A
	1ms	I_{CP}	
Collector Power Dissipation ($T_c = 25^\circ C$)	P_C	200	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	$-55 \sim 150$	$^\circ C$
Screw Torque	—	0.8	N·m

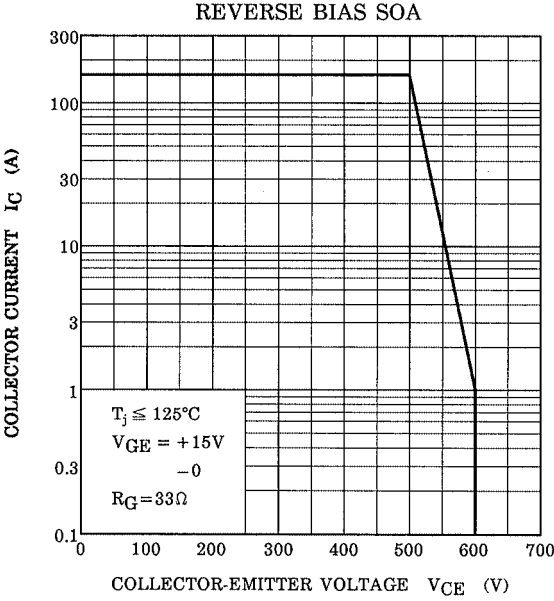


ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

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}	$V_{CE} = 600V, V_{GE} = 0$	—	—	1.0	mA
Gate-Emitter Cut-off Voltage	$V_{GE(OFF)}$	$I_C = 80mA, V_{CE} = 5V$	3.0	—	6.0	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)} (1)$	$I_C = 10A, V_{GE} = 15V$	—	—	2.0	V
	$V_{CE(sat)} (2)$	$I_C = 80A, V_{GE} = 15V$	—	2.5	3.5	
Input Capacitance	C_{ies}	$V_{CE} = 10V, V_{GE} = 0, f = 1MHz$	—	5500	—	pF
Switching Time	Rise Time		—	0.3	0.6	μs
	Turn-on Time		—	0.5	0.8	
	Fall Time		—	0.25	0.40	
	Turn-off Time		—	0.7	1.0	
Thermal Resistance	$R_{th(j-c)}$	—	—	—	0.625	$^\circ C / W$







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