

737-914

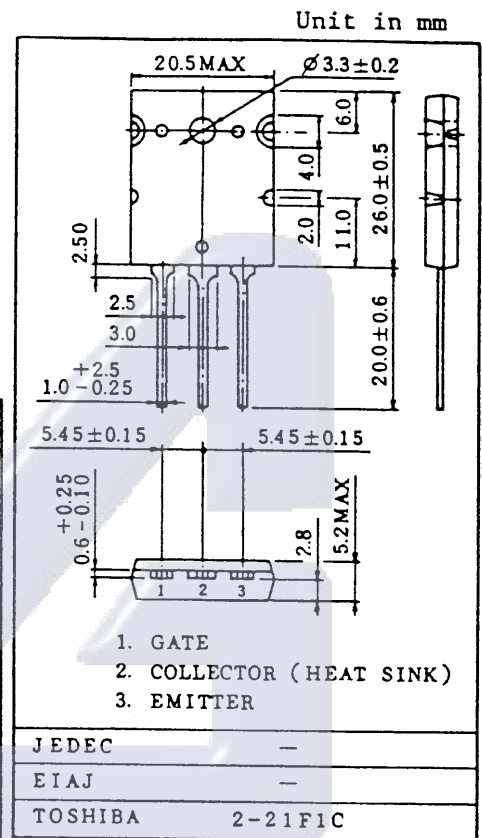
GT50J101

HIGH POWER SWITCHING APPLICATIONS.

- High Input Impedance
- High Speed : $t_f = 0.35\mu s$ (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}	600	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	DC	I_C	A
	lms	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}	-55~150	$^\circ C$
Screw Torque	-	0.8	Nm

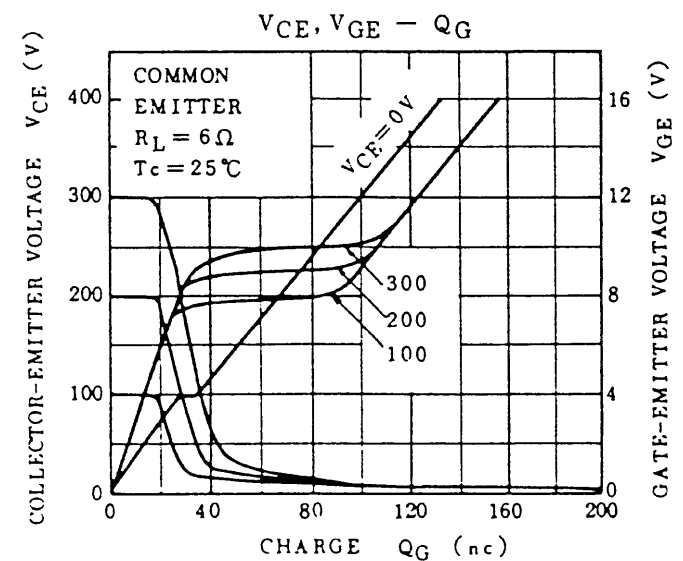
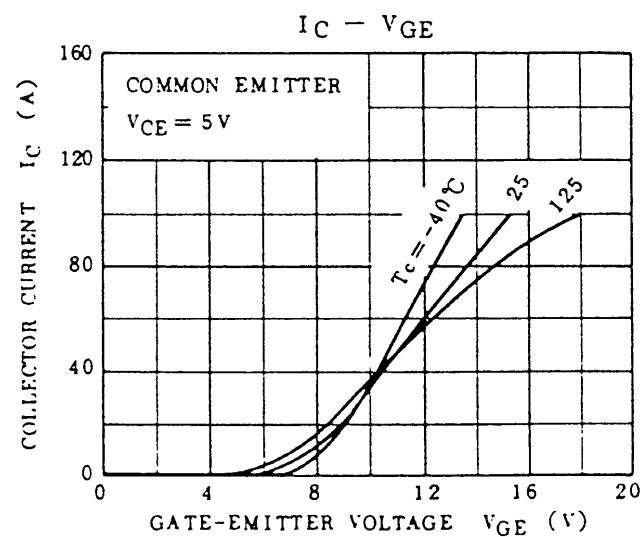
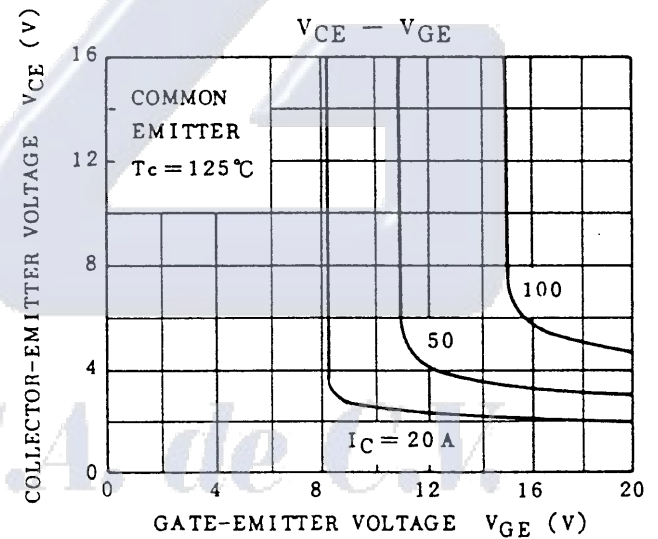
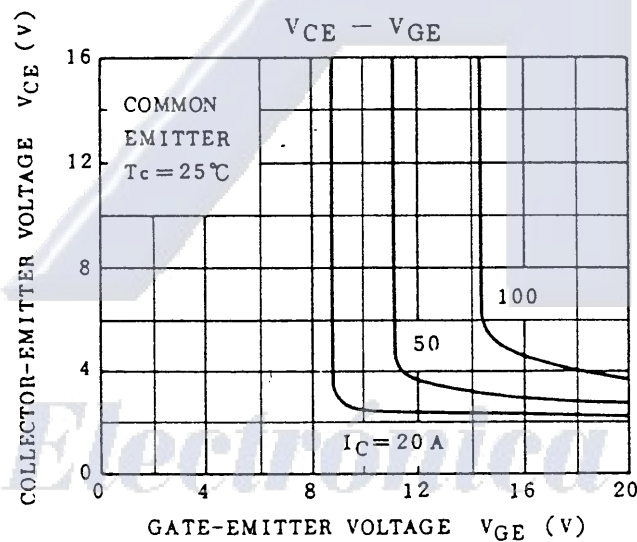
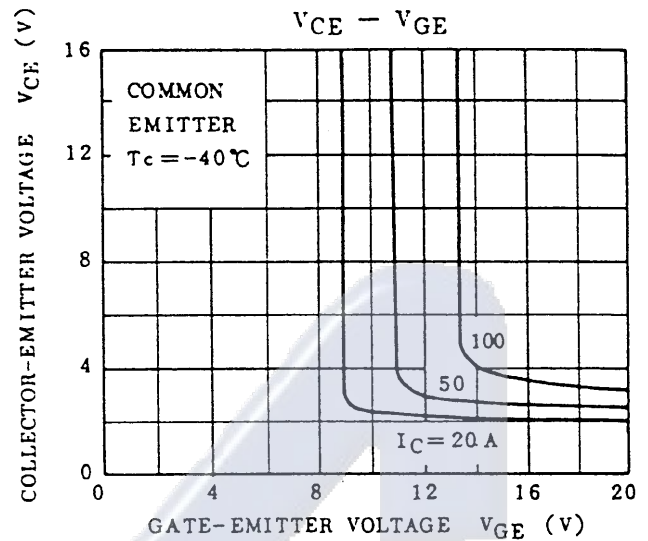
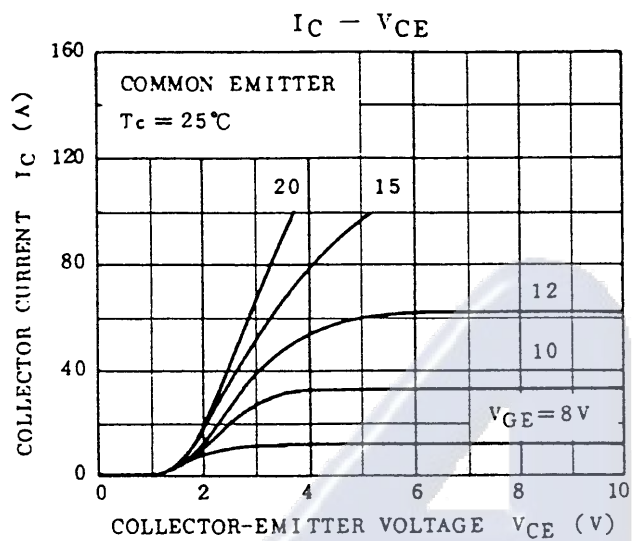


Weight : 9.75g

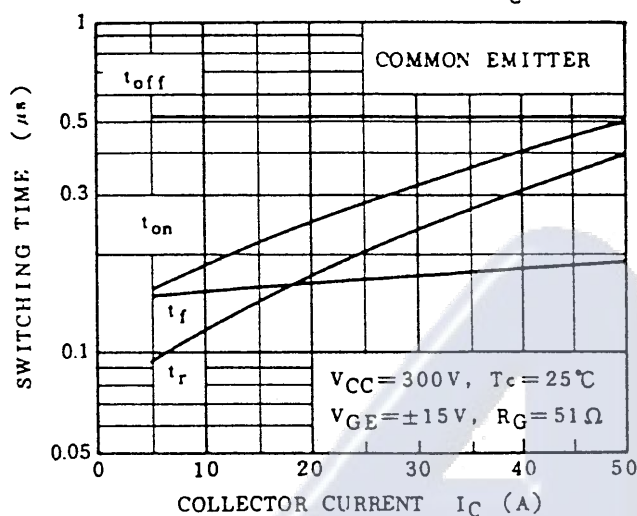
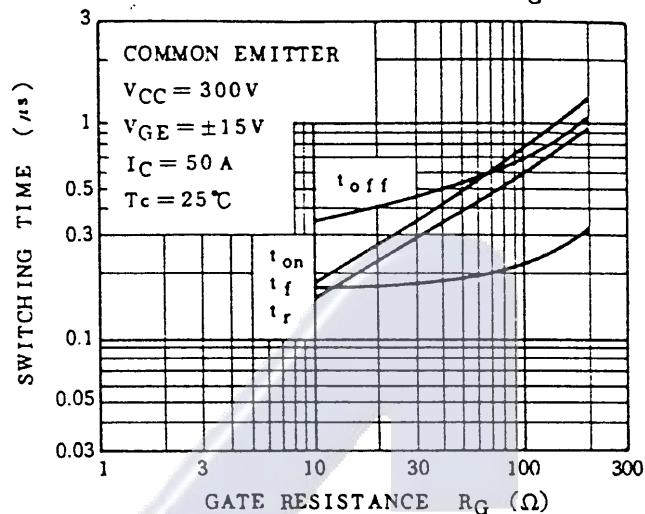
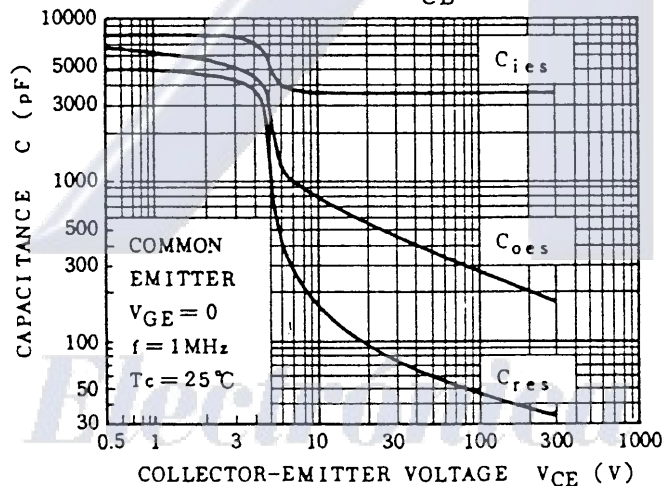
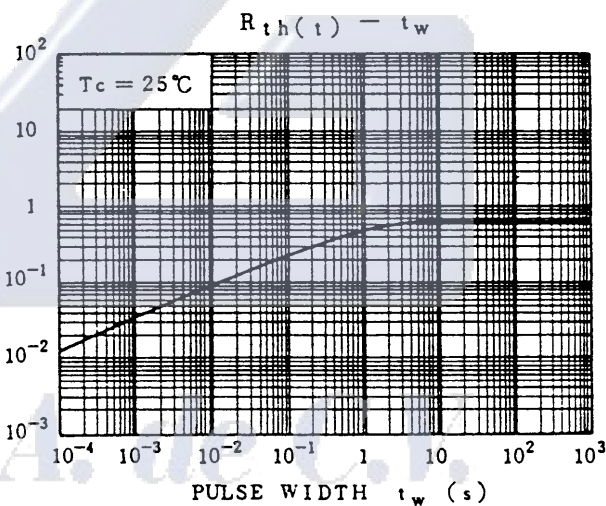
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

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_{CFS}	$V_{CE} = 600V, V_{GE} = 0$	-	-	1.0	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C = 2mA, V_{GE} = 0$	600	-	-	V
Gate-Emitter Cut-off Voltage	$V_{GE(off)}$	$I_C = 50mA, V_{CE} = 5V$	3.0	-	6.0	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 50A, V_{GE} = 15V$	-	3.0	4.0	V
Input Capacitance	C_{ies}	$V_{CE} = 10V, V_{GE} = 0, f = 1MHz$	-	3500	-	pF
Switching Time	Rise Time		-	0.3	0.6	μs
	Turn-on Time		-	0.4	0.8	
	Fall Time		-	0.15	0.35	
	Turn-off Time		-	0.50	1.00	
Thermal Resistance	$R_{th(j-c)}$	-	-	-	0.625	$^\circ C/W$

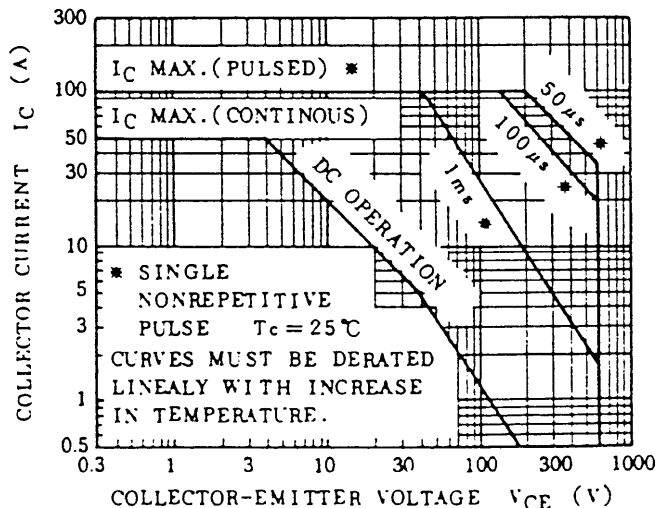
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SWITCHING TIME - I_C SWITCHING TIME - R_G C - V_{CE} THERMAL TRANSIENT RESISTANCE $R_{th}(t)$ ($^\circ C/W$)

SAFE OPERATING AREA



REVERSE BIAS SOA

