

TOSHIBA INSULATED GATE BIPOLAR TRANSISTOR SILICON P CHANNEL TYPE

GT20D201

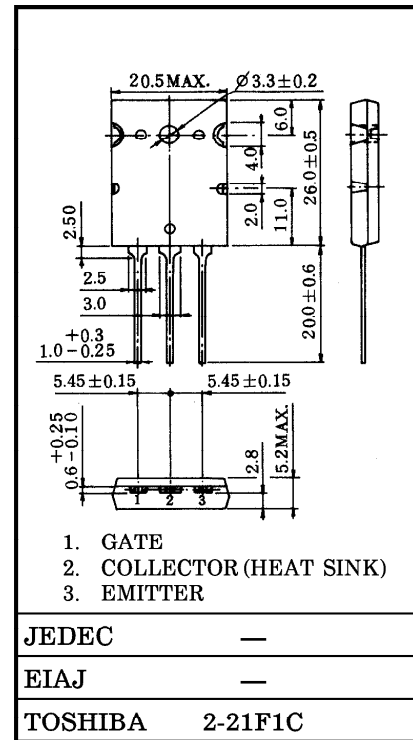
HIGH POWER AMPLIFIER APPLICATION

Unit in mm

- High Breakdown Voltage : $V_{CES} = -250V$ (Min.)
- High Forward Transfer Admittance : $|Y_{fe}| = 10S$ (Typ.)
- Complementary to GT20D101
- Enhancement-Mode

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CES}	-250	V
Gate-Emitter Voltage	V_{GES}	± 20	V
Collector Current	I_C	-20	A
Latch Up Current	I_L	-60	A
Collector Power Dissipation ($T_c = 25^\circ C$)	P_C	180	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



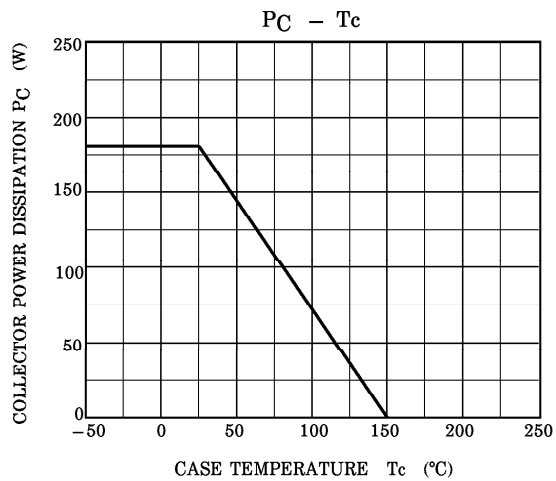
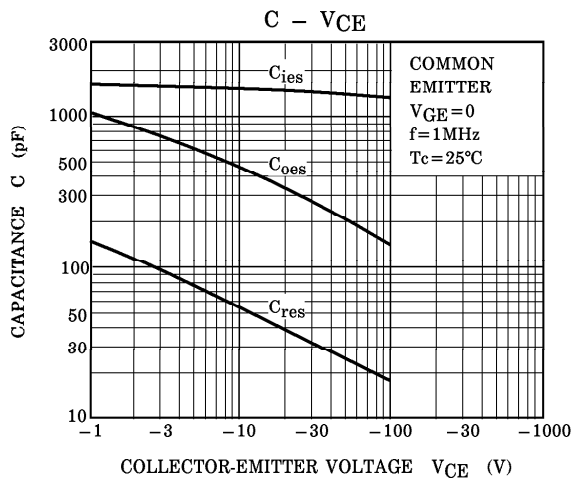
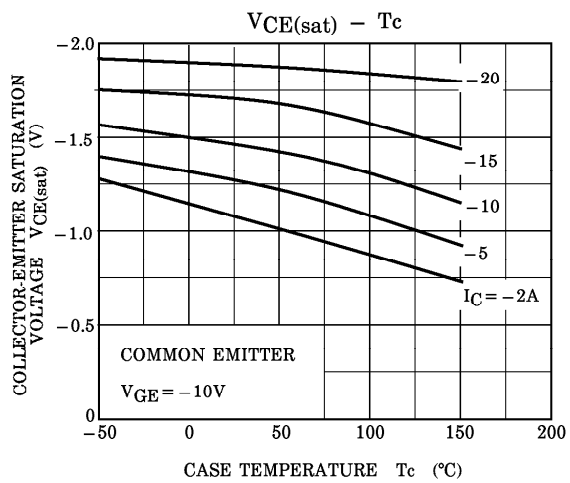
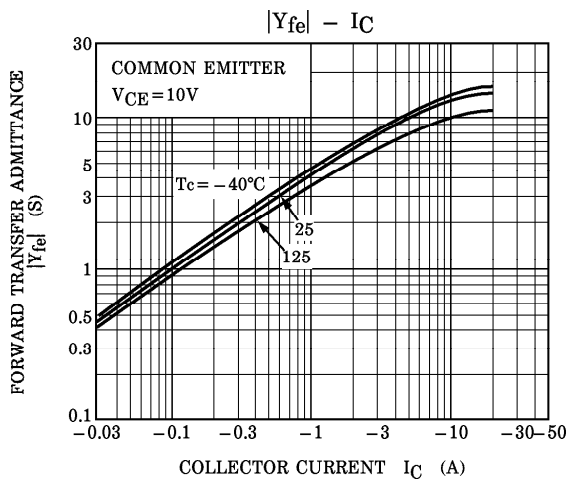
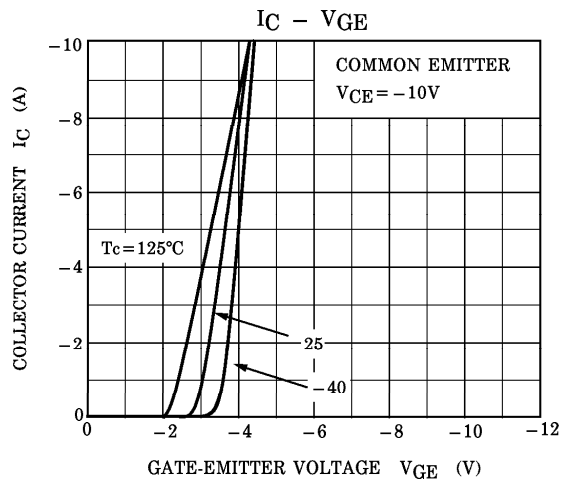
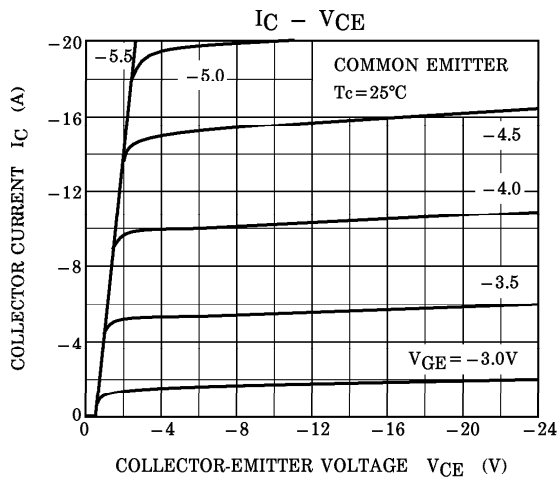
Weight : 9.75g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CES}	$V_{CE} = -250V, V_{GE} = 0$	—	—	-50	μA
Gate Leakage Current	I_{GES}	$V_{GE} = \pm 20V, V_{CE} = 0$	—	—	± 10	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -15A, V_{GE} = -10V$	—	-1.7	-3.0	V
Gate-Emitter Cut-off Voltage	$V_{GE(OFF)}$	$V_{CE} = -10V, I_C = -100mA$	-1.4	—	-3.2	V
Forward Transfer Admittance	$ Y_{fe} $	$V_{CE} = -10V, I_C = -1A$	—	3	—	S
	$ Y_{fe} $	$V_{CE} = -10V, I_C = -10A$	—	10	—	
Input Capacitance	C_{ies}	$V_{CE} = -10V, I_E = 0$ $f = 1MHz$	—	1450	—	pF
Output Capacitance	C_{oes}	$V_{CE} = -10V, I_E = 0$ $f = 1MHz$	—	450	—	pF
Reverse Transfer Capacitance	C_{res}	$V_{CE} = -10V, I_E = 0$ $f = 1MHz$	—	50	—	pF

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