

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

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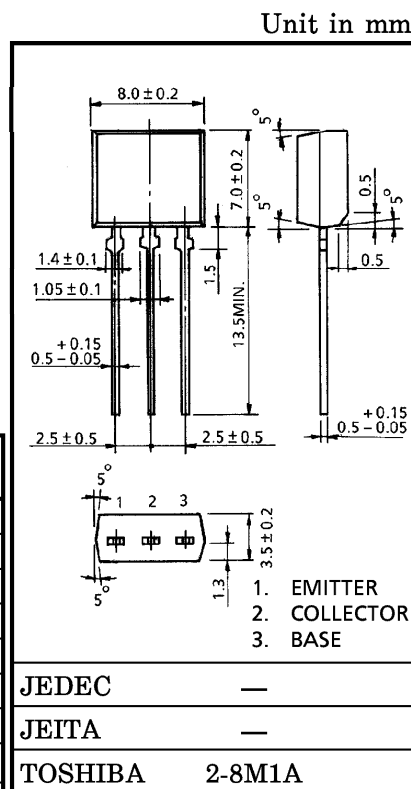
STORBE FLASH APPLICATIONS

MEDIUM POWER AMPLIFIER APPLICATIONS

- $h_{FE(1)} = 100 \sim 320$
- $h_{FE(2)} = 70$ (Min.)
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.0V$ (Max.)
- High Power Dissipation : $P_C = 1.3W$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-35	V
Collector-Emitter Voltage	V_{CE0}	-20	V
Emitter-Base Voltage	V_{EB0}	-8	V
Collector Current	DC	I_C	-5 A
	Pulse (Note 1)	I_{CP}	-8 A
Base Current	I_B	-0.5	A
Collector Power Dissipation	P_C	1.3	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

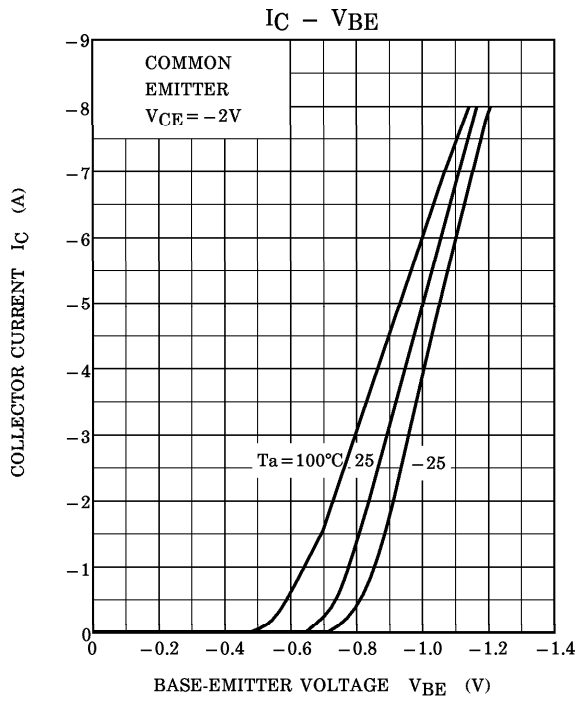
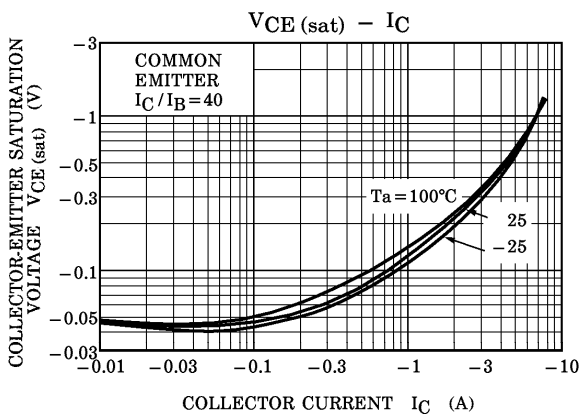
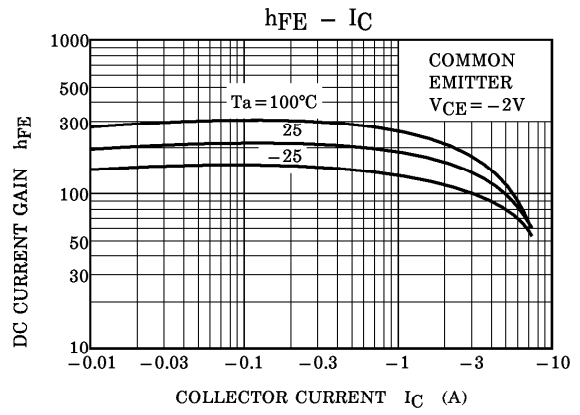
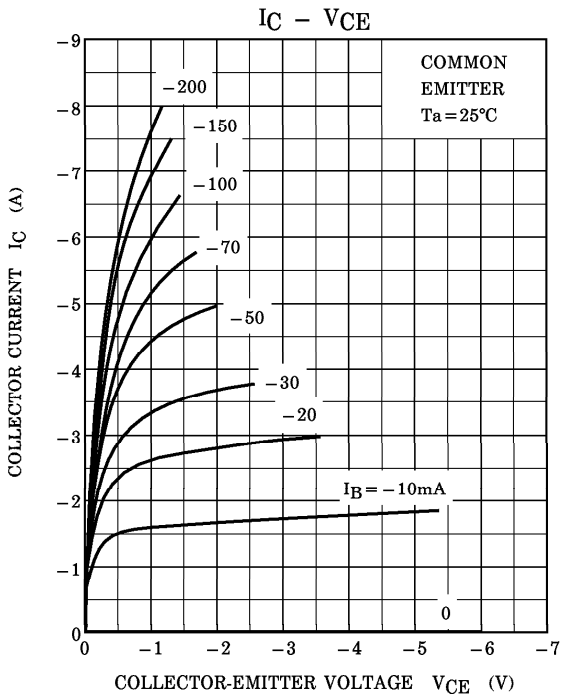


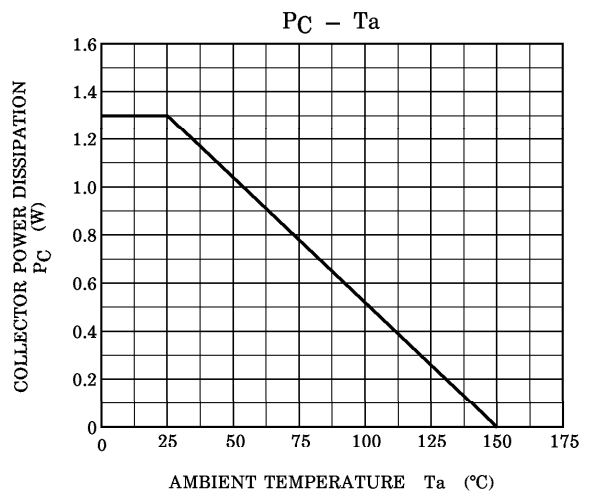
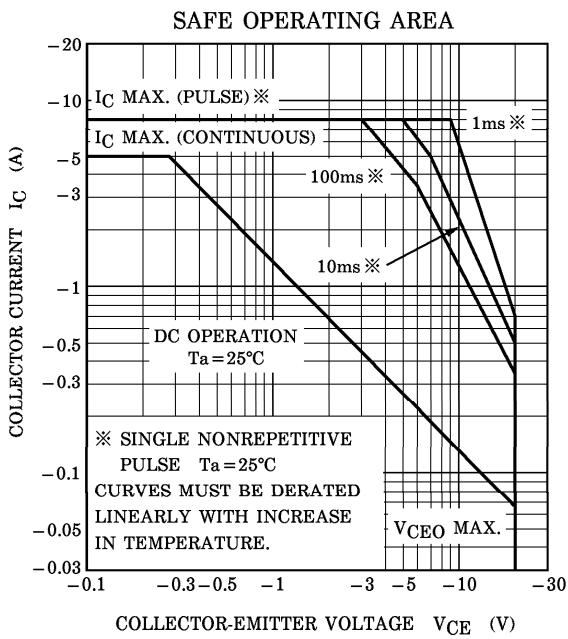
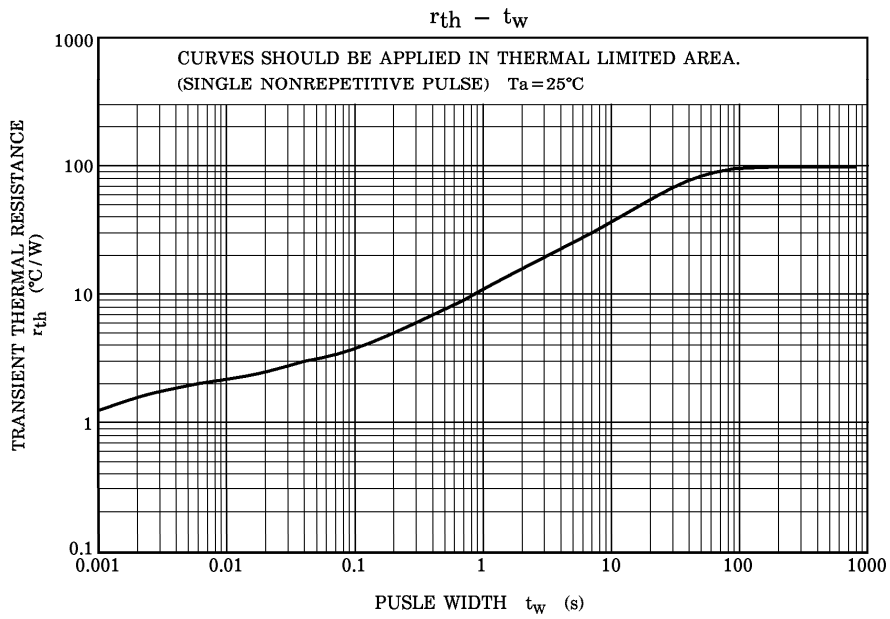
(Note 1) : Conditions : Pulse width = 10ms (Max.), Duty cycle = 30% (Max.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB} = -35V, I_E = 0$	—	—	-100	nA
Emitter Cut-off Current	I_{EB0}	$V_{EB} = -8V, I_C = 0$	—	—	-100	nA
Collector-Emitter Breakdown Voltage	V_{CE0}	$I_C = -10mA, I_B = 0$	-20	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note 2)	$V_{CE} = -2V, I_C = -0.5A$	100	—	320	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -4A$	70	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -4A, I_B = -0.1A$	—	—	-1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V, I_C = -4A$	—	—	-1.5	V
Transition Frequency	f_T	$V_{CE} = -2V, I_C = -0.5A$	—	170	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	62	—	pF

(Note 2) : $h_{FE(1)}$ Classification O : 100~200, Y : 160~320





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