

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

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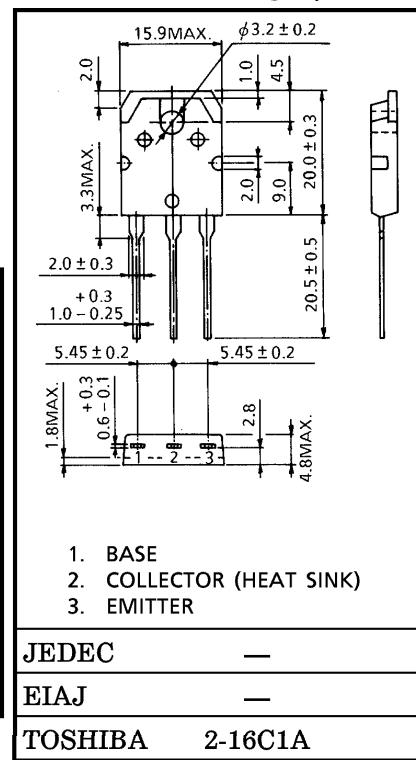
SWITCHING REGULATOR AND HIGH VOLTAGE SWITCHING APPLICATIONS.

HIGH SPEED DC-DC CONVERTER APPLICATIONS.

- Excellent Switching Times ($I_C = 0.8A$)
 $t_r = 1.0\mu s$ (Max.), $t_f = 1.0\mu s$ (Max.)
- High Collector-Emitter Breakdown Voltage : $V_{CEO} = 800V$

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

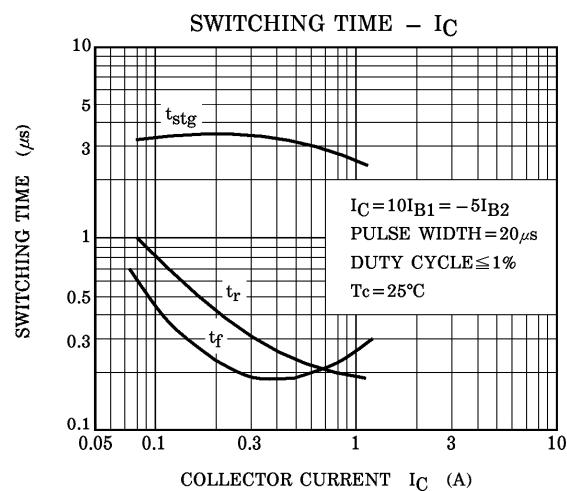
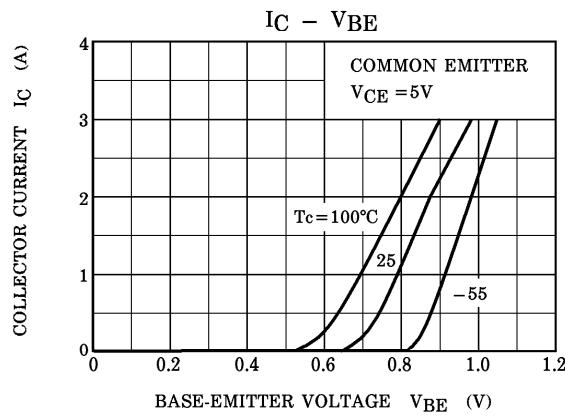
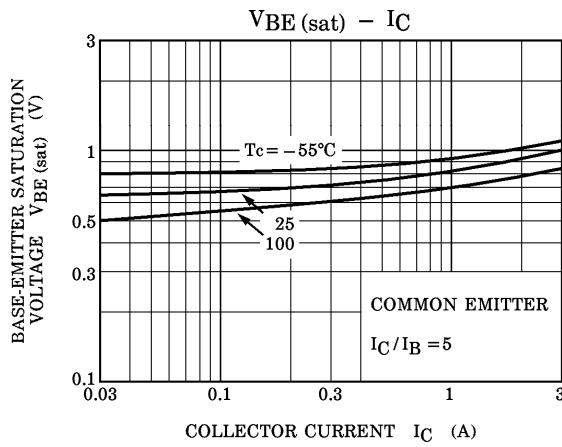
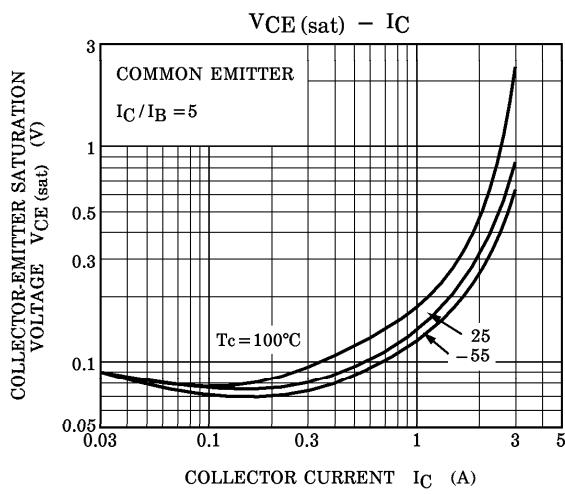
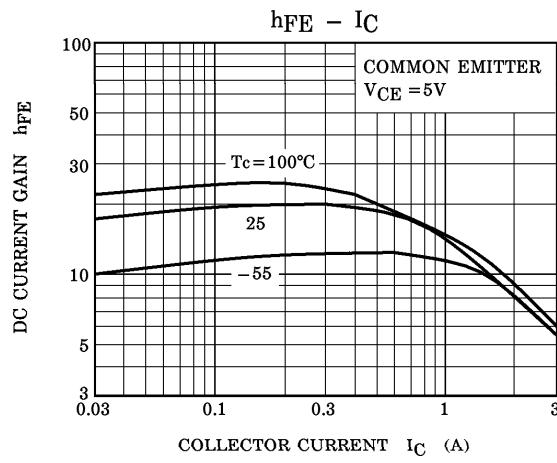
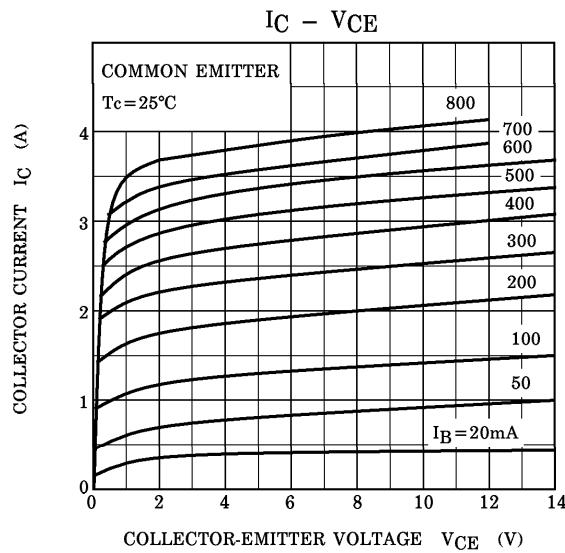
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	900	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	DC	I_C	A
	Pulse	I_{CP}	A
Base Current	I_B	1	A
Collector Power Dissipation ($T_c = 25^\circ C$)	P_C	60	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

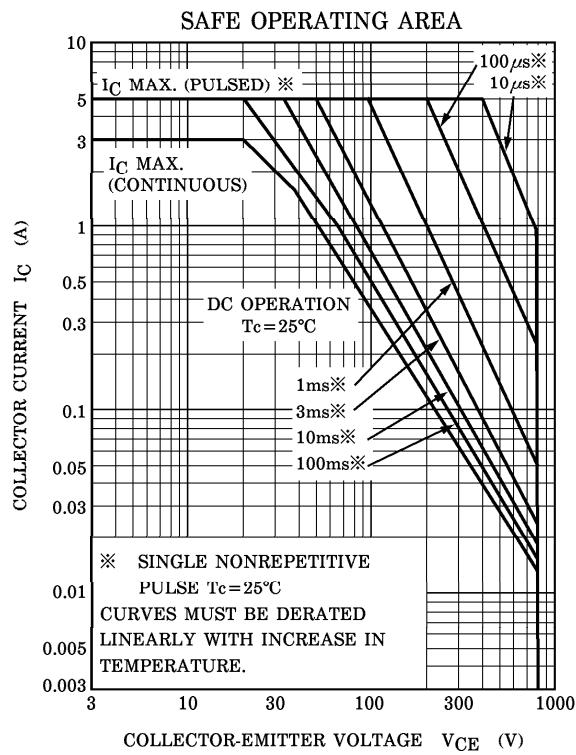
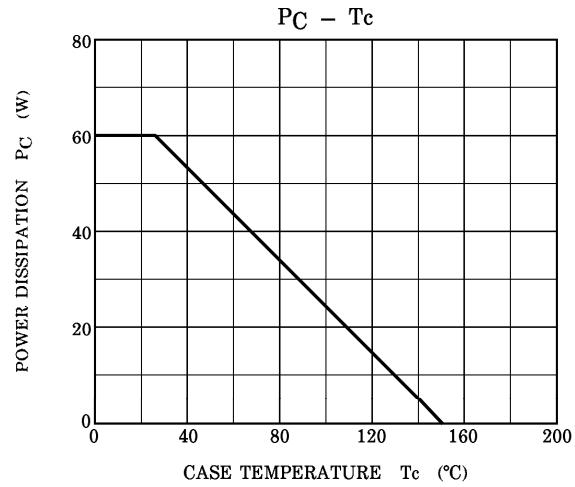
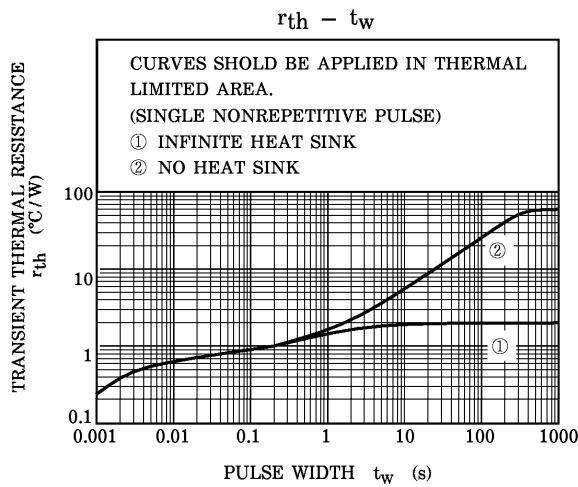
INDUSTRIAL APPLICATIONS
Unit in mm

Weight : 4.7g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 800V, I_E = 0$	—	—	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 7V, I_C = 0$	—	—	1	mA
Collector-Base Breakdown Voltage	$V_{(BR) CBO}$	$I_C = 1mA, I_E = 0$	900	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = 10mA, I_B = 0$	800	—	—	V
DC Current Gain	h_{FE}	$V_{CE} = 5A, I_C = 0.8A$	10	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 0.8A, I_B = 0.16A$	—	—	0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 0.8A, I_B = 0.16A$	—	—	1.2	V
Switching Time	Rise Time	t_r		—	—	1.0
	Storage Time	t_{stg}		—	—	4.0
	Fall Time	t_f		—	—	1.0





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