

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE

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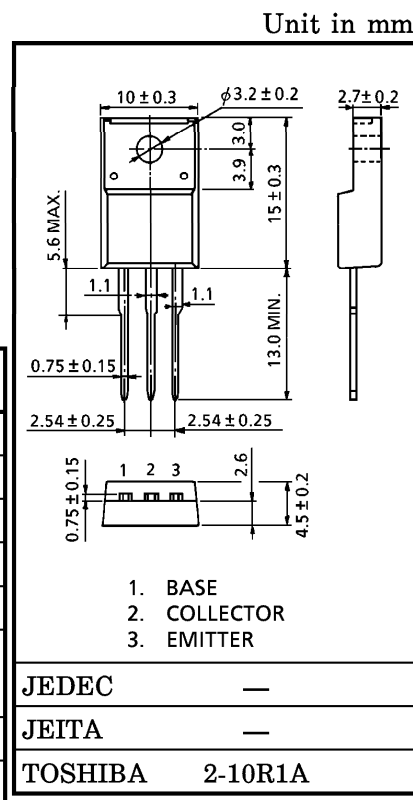
HIGH VOLTAGE SWITCHING APPLICATIONS

HIGH SPEED DC-DC CONVERTER APPLICATION

- Excellent Switching Times
 $t_{on} = 1.0 \mu s$ (Max.), $t_f = 1.0 \mu s$ (Max.) at $I_C = -0.3A$
- High Collector Breakdown Voltage : $V_{CEO} = -400V$

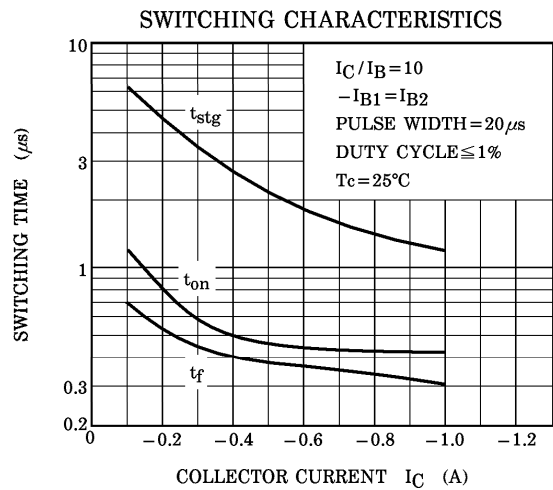
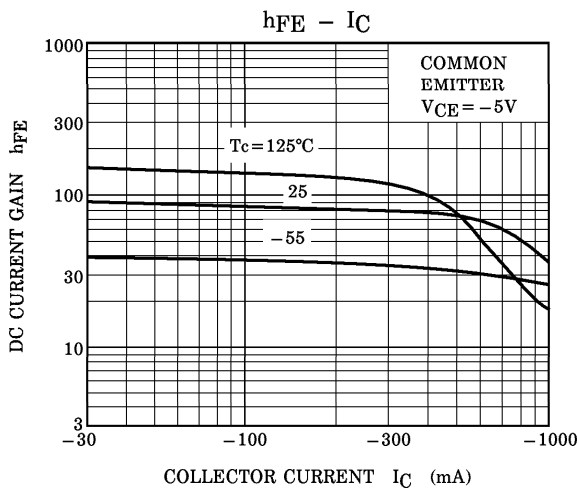
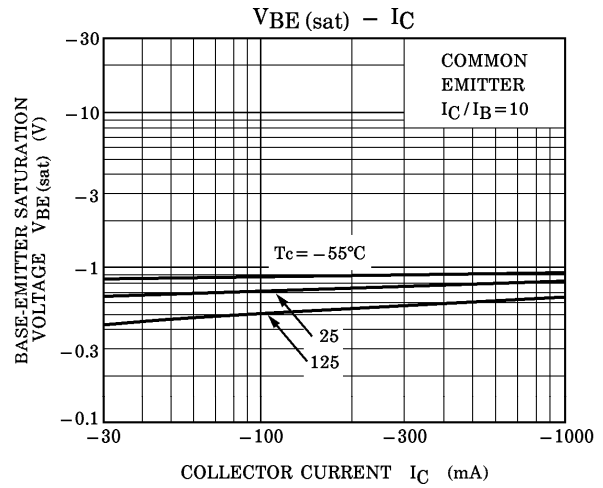
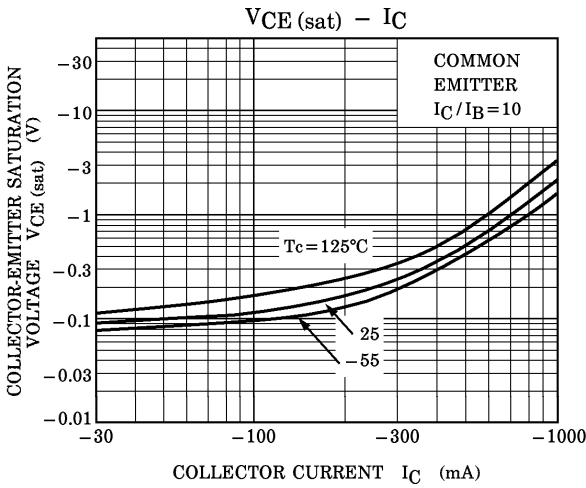
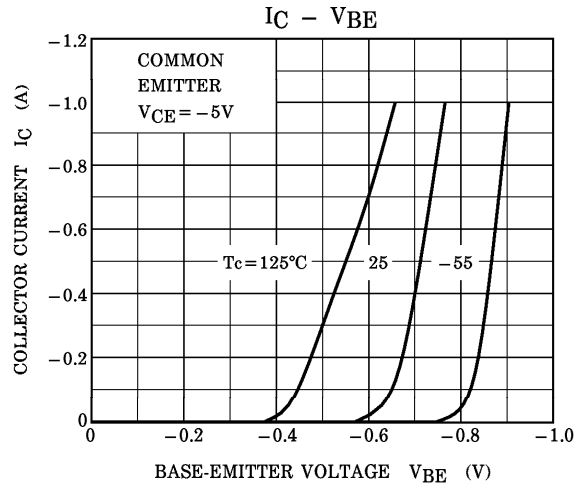
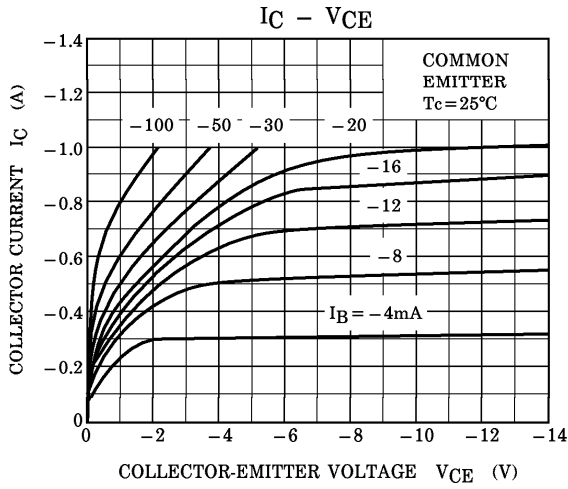
MAXIMUM RATINGS ($T_c = 25^\circ C$)

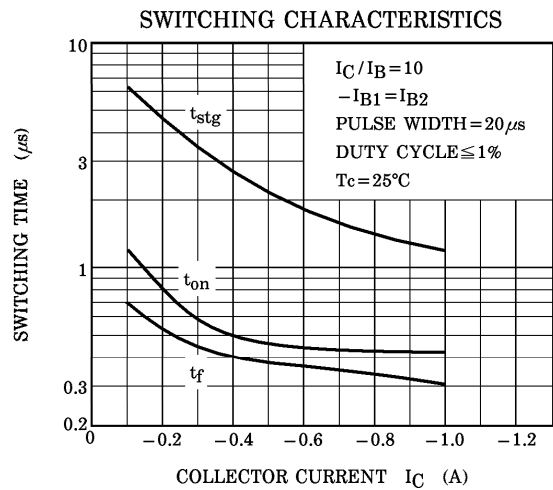
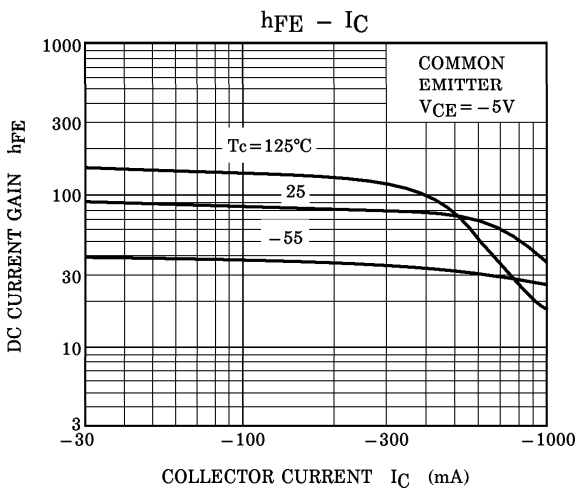
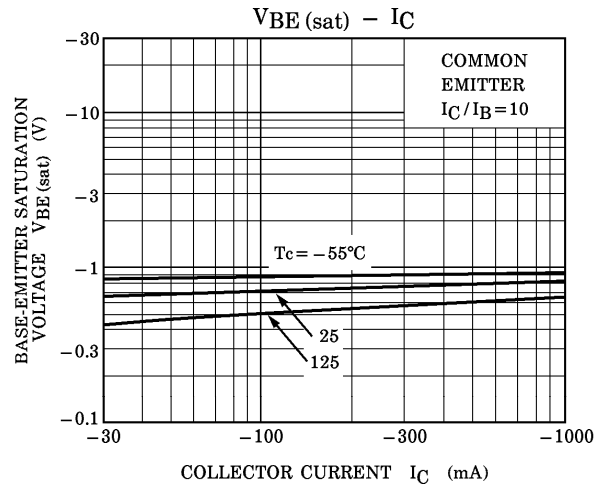
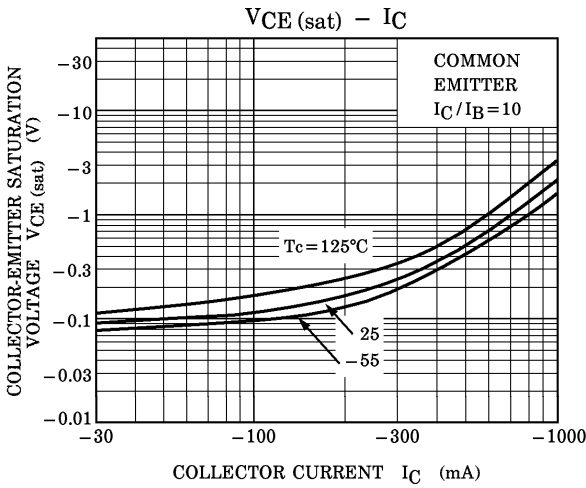
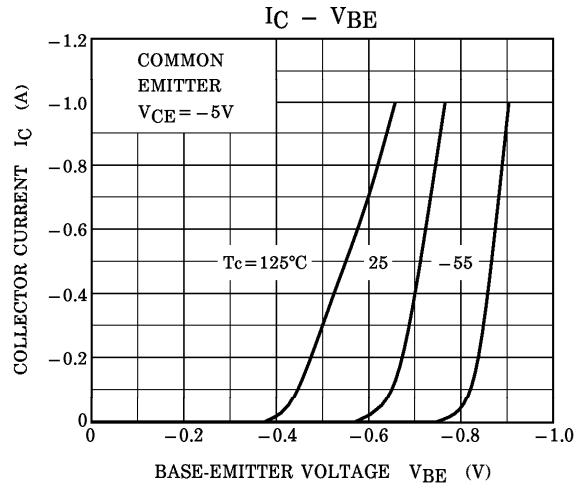
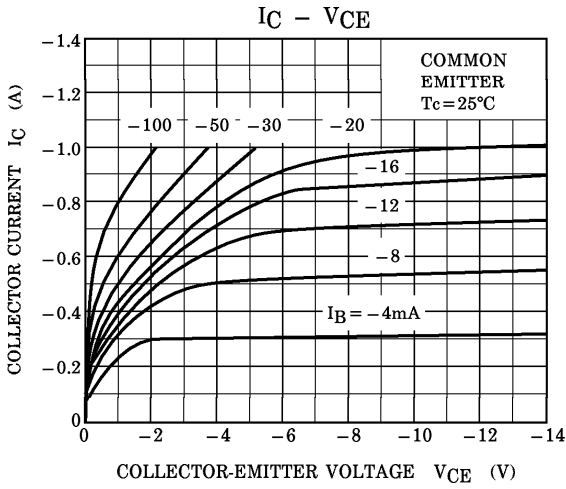
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-400	V
Collector-Emitter Voltage	V_{CEO}	-400	V
Emitter-Base Voltage	V_{EBO}	-7	V
Collector Current	I_C	-1	A
Base Current	I_B	-0.5	A
Collector Power Dissipation	P_C	$T_a = 25^\circ C$	2.0
		$T_c = 25^\circ C$	25
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -400V, I_E = 0$	—	—	-1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -7V, I_C = 0$	—	—	-1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-400	—	—	V
DC Current Gain	h_{FE}	$V_{CE} = -5V, I_C = -0.3A$	30	—	100	
		$V_{CE} = -5V, I_C = -0.5A$	20	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -0.3A, I_B = -30mA$	—	-0.25	-1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -0.3A, I_B = -30mA$	—	-0.75	-1.2	V
Switching Time	Rise Time	t_{on}	—	—	1.0	μs
	Storage Time	t_{stg}	—	—	5.0	
	Fall Time	t_f	—	—	1.0	





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