

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC2792

SWITCHING REGULATOR AND HIGH VOLTAGE

SWITCHING APPLICATIONS.

HIGH SPEED DC-DC CONVERTER APPLICATIONS.

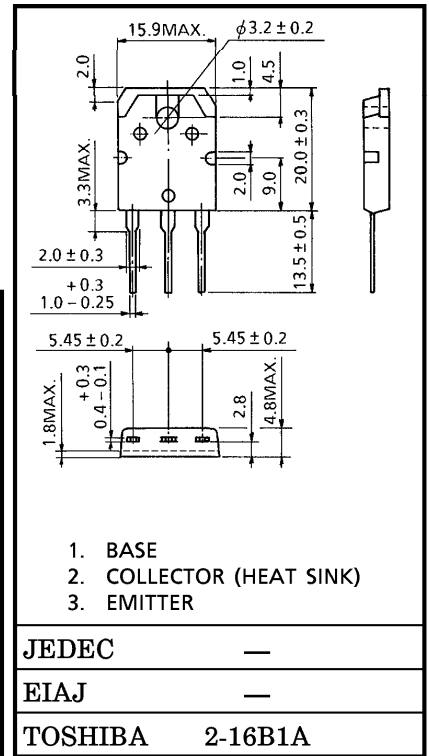
INDUSTRIAL APPLICATIONS

Unit in mm

- Excellent Switching Times ($I_C=0.5A$)
 $t_r=1.0\mu s$ Max. $t_f=1.0\mu s$ Max.
- High Collector Breakdown Voltage : $V_{CEO}=800V$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	850	V
Collector-Emitter Voltage	V_{CEO}	800	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current	DC	I_C	2 A
	Pulse	I_{CP}	4 A
Base Current	I_B	1	A
Collector Power Dissipation ($T_c = 25^\circ C$)	P_C	80	W
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

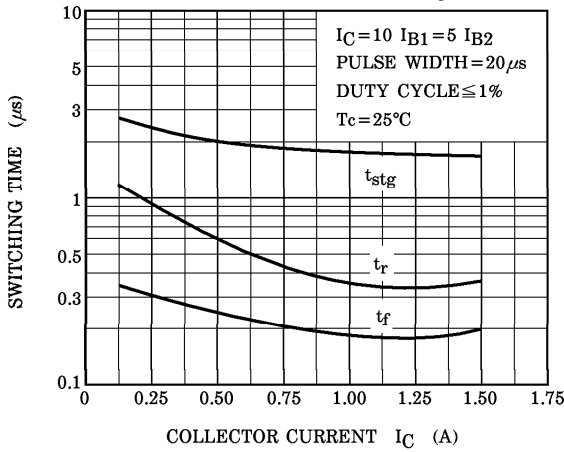


Weight : 4.6g

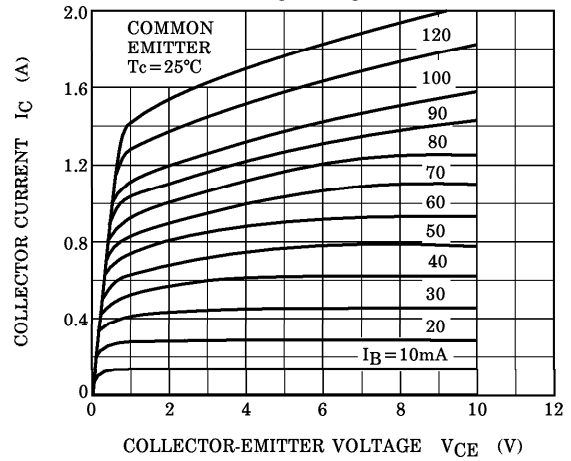
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

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	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	850	—	—	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	800	—	—	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=0.5A$	10	—	—	
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$ $I_C=0.5A, I_B=0.05A$	—	—	1.0	V
	Base-Emitter	$V_{BE(sat)}$ $I_C=0.5A, I_B=0.05A$	—	—	1.5	V
Switching Time	Rise Time	t_r 	—	—	1.0	μs
	Storage Time	t_{stg}	—	—	4.0	
	Fall Time	t_f $2I_{B1} = -I_{B2} = 0.1A,$ DUTY CYCLE $\leq 1\%$	—	—	1.0	

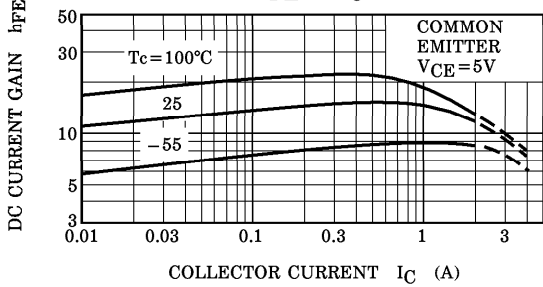
SWITCHING TIME - I_C



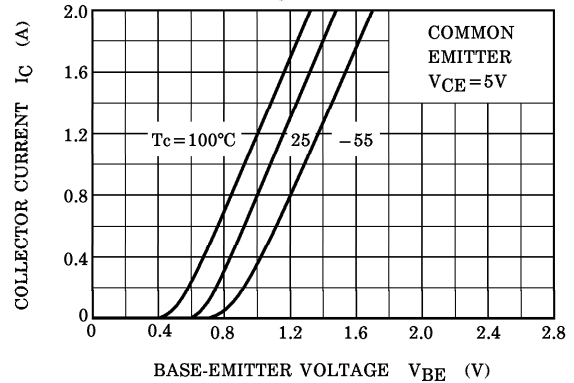
$I_C - V_{CE}$



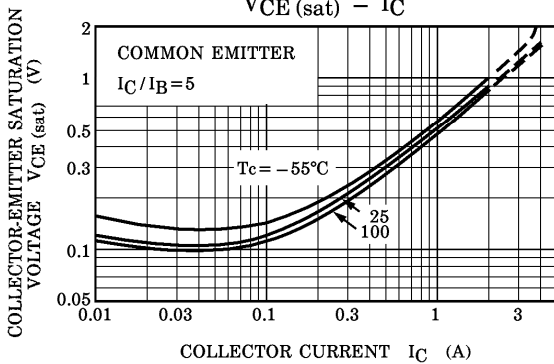
$h_{FE} - I_C$



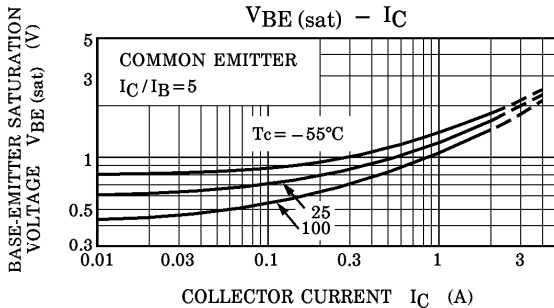
$I_C - V_{BE}$



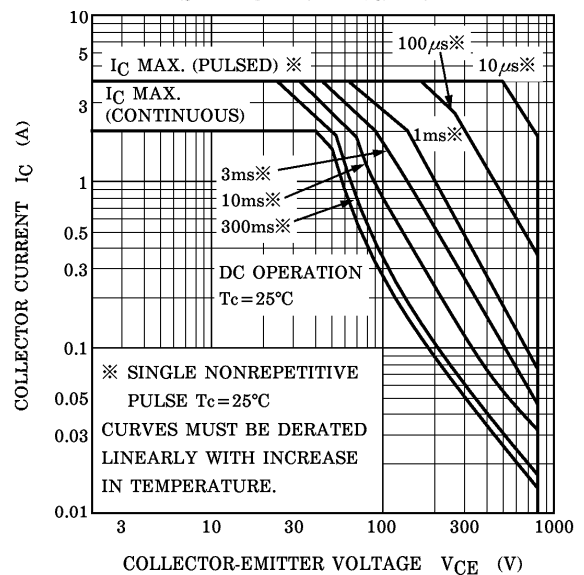
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



SAFE OPERATING AREA



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