

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

# 2SC2792

SWITCHING REGULATOR AND HIGH VOLTAGE

SWITCHING APPLICATIONS.

HIGH SPEED DC-DC CONVERTER APPLICATIONS.

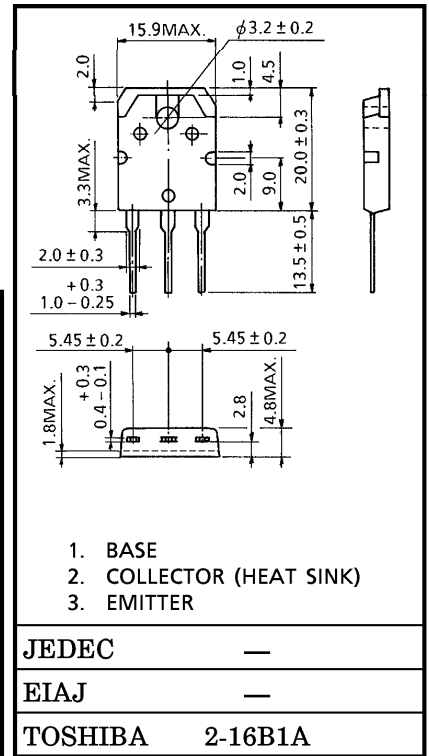
INDUSTRIAL APPLICATIONS

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	$^\circ C$

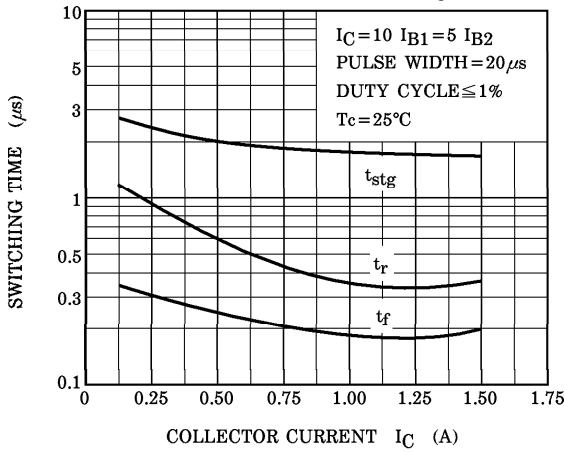


Weight : 4.6g

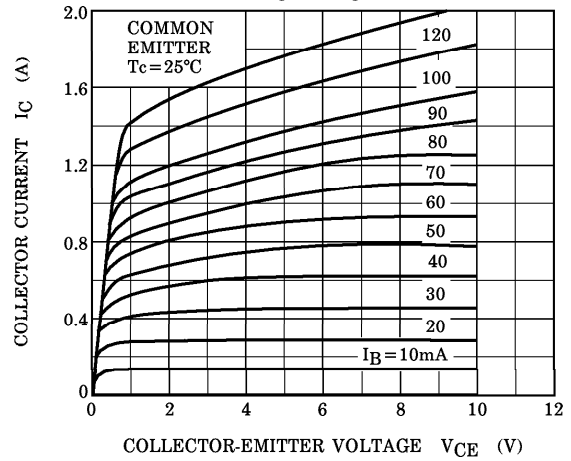
ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=800V, I_E=0$	—	—	100	$\mu A$
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	$\mu s$
	Storage Time	$t_{stg}$	—	—	4.0	
	Fall Time	$t_f$	—	—	1.0	

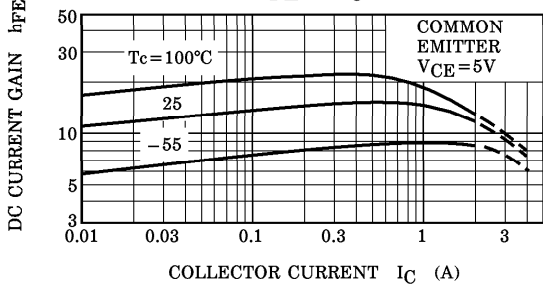
SWITCHING TIME -  $I_C$



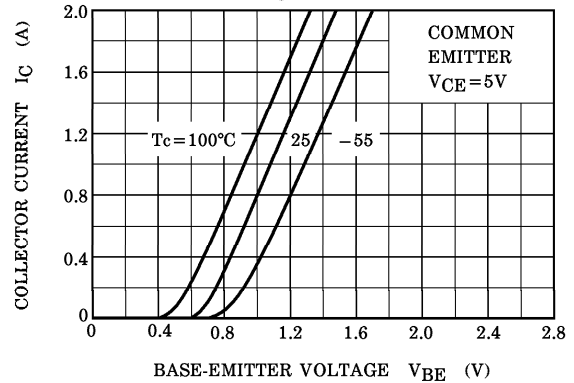
$I_C - V_{CE}$



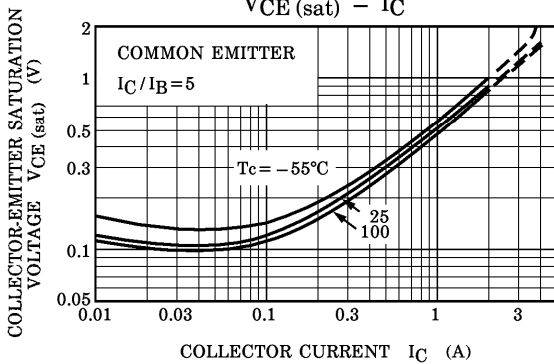
$h_{FE} - I_C$



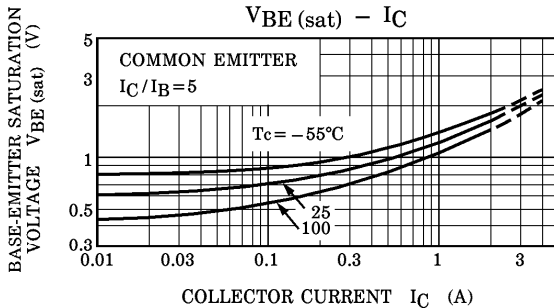
$I_C - V_{BE}$



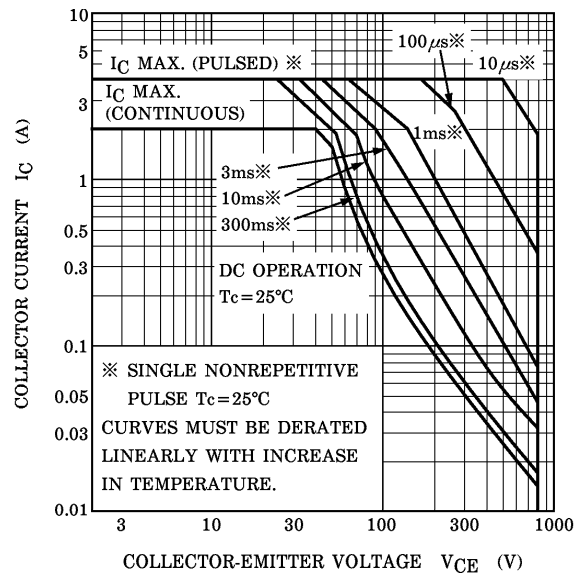
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



SAFE OPERATING AREA



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