

TOSHIBA TRANSISTOR SILICON NPN TRIPLE DIFFUSED TYPE

2SC2792

SWITCHING REGULATOR AND HIGH VOLTAGE

SWITCHING APPLICATIONS.

HIGH SPEED DC-DC CONVERTER APPLICATIONS.

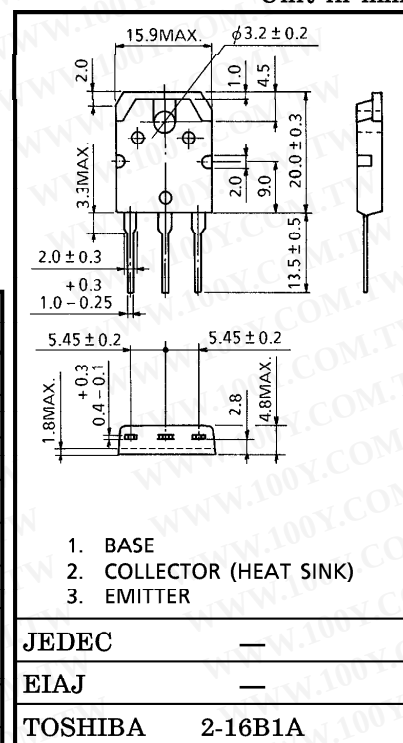
INDUSTRIAL APPLICATIONS

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}	$-55\sim 150$	$^\circ C$



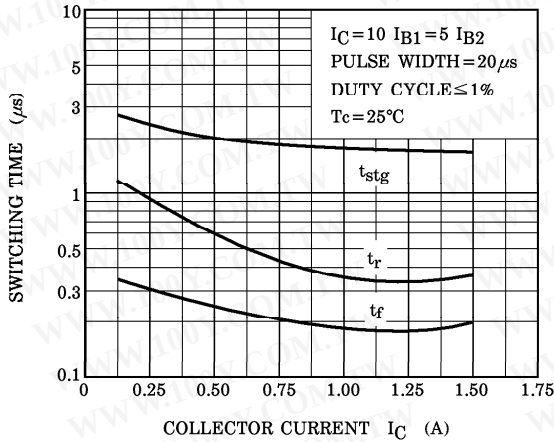
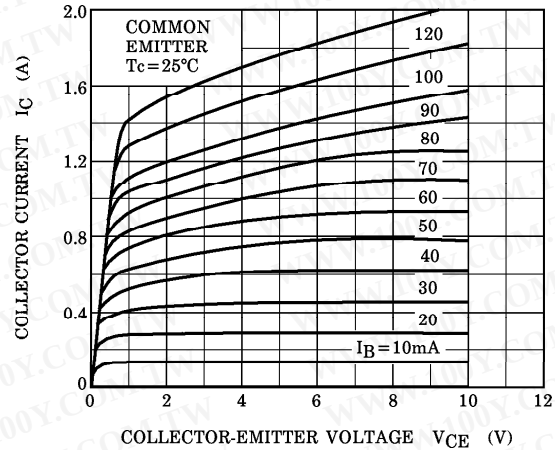
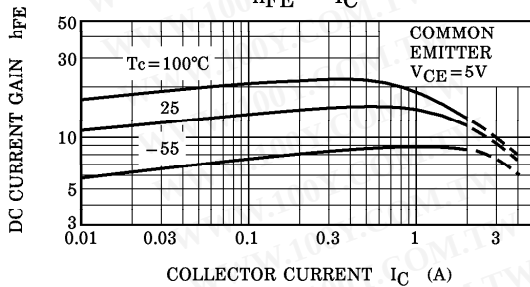
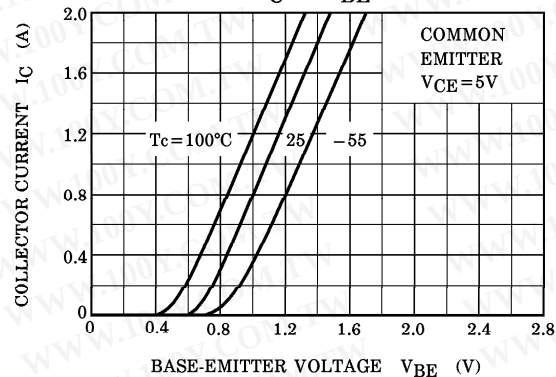
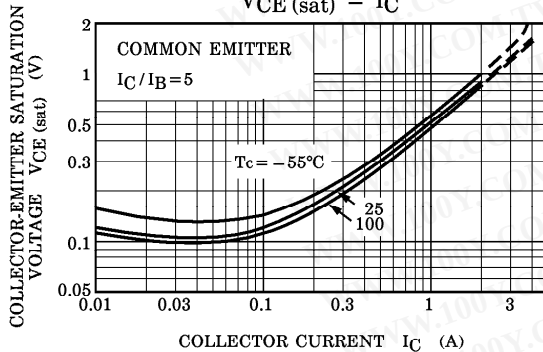
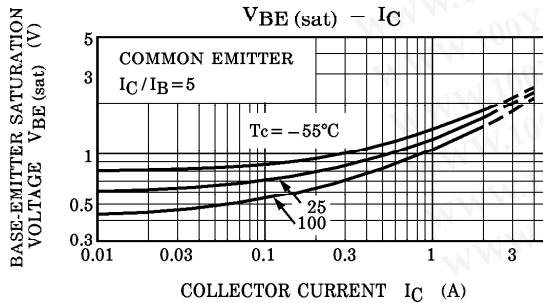
Weight : 4.6g

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

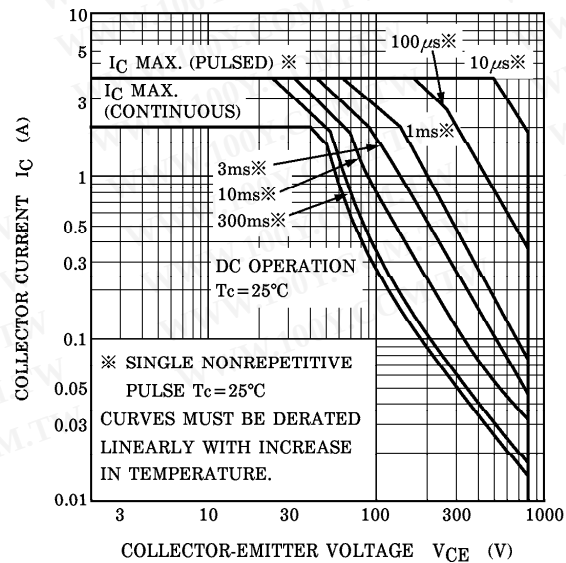
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=800V, I_E=0$	—	—	100	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=7V, I_C=0$	—	—	1	mA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	850	—	—	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	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	$V_{CC}=400V$ $20\mu s$ I_{B1} INPUT I_{B1} I_{B2} I_{B2} $2I_{B1} = -I_{B2} = 0.1A$, DUTY CYCLE $\leq 1\%$	—	—	1.0	μs
	Storage Time	t_{stg}		—	—	4.0	
	Fall Time	t_f		—	—	1.0	

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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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