

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07600 DT-33-73

SILICON NPN TRIPLE DIFFUSED TYPE

**2SC2791**

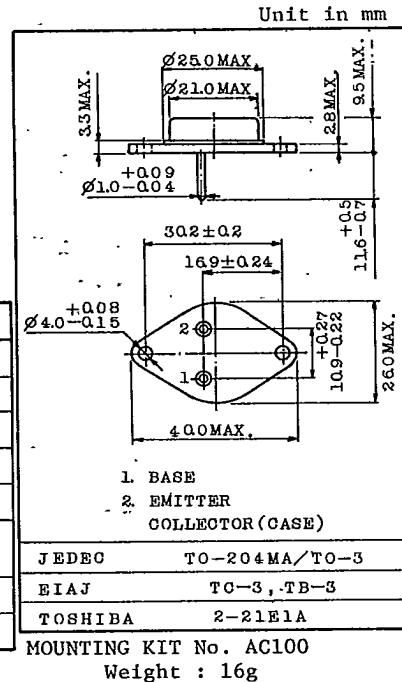
HIGH SPEED AND HIGH VOLTAGE SWITCHING APPLICATIONS,  
SWITCHING REGULATOR APPLICATIONS.  
HIGH SPEED DC-DC CONVERTER APPLICATIONS.

## FEATURES:

- Excellent Switching Times  
:  $t_r=1.0\mu s$  (Max.);  $t_f=1.0\mu s$  (Max.) ( $I_C=3A$ )
- High Collector 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	$I_C$	5	A
Base Current	$I_B$	3	A
Collector Power Dissipation ( $T_c=25^\circ C$ )	$P_C$	100	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$

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	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	900	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	800	-	-	V
DC Current Gain	$h_{FE}(1)$	$V_{CE}=5V, I_C=10mA$ (Note)	10	-	-	
	$h_{FE}(2)$	$V_{CE}=5V, I_C=3A$ (Note)	10	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=0.6A$ (Note)	-	-	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=3A, I_B=0.6A$ (Note)	-	-	1.5	V
Switching Time	Rise Time	$t_r$	-	-	1.0	$\mu s$
	Storage Time	$t_{stg}$	-	-	3.5	
	Fall Time	$t_f$	-	-	1.0	

Note: Pulse Test : Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$

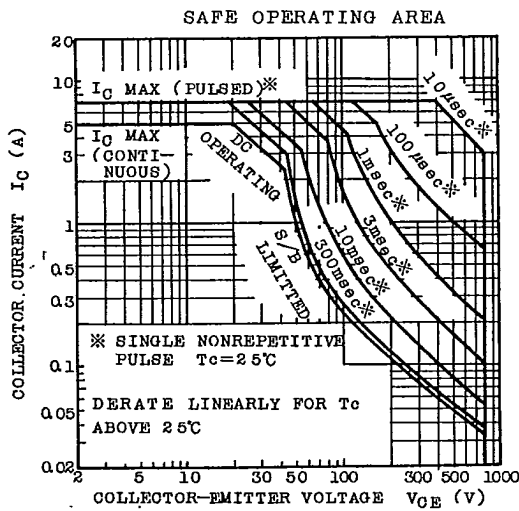
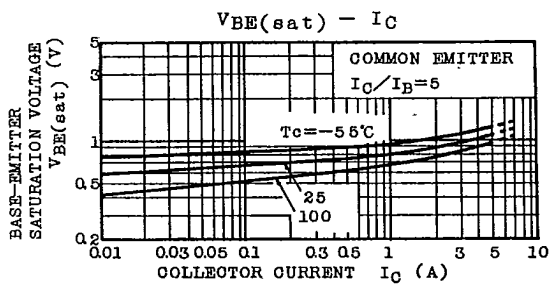
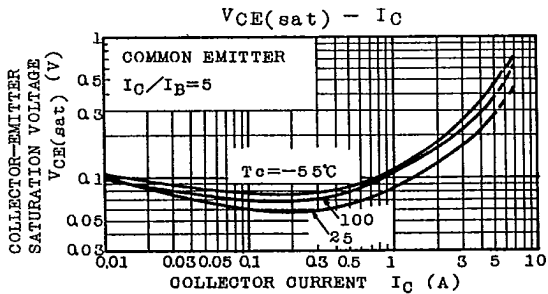
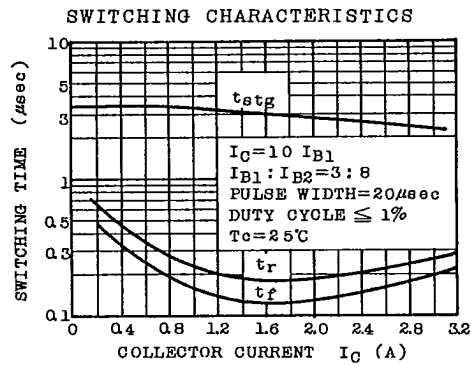
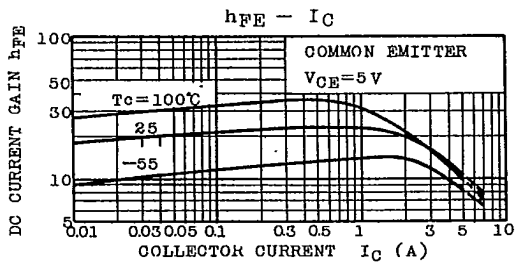
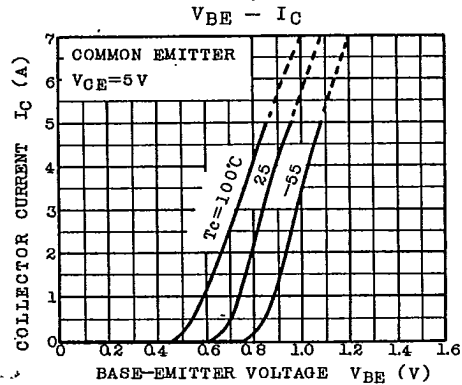
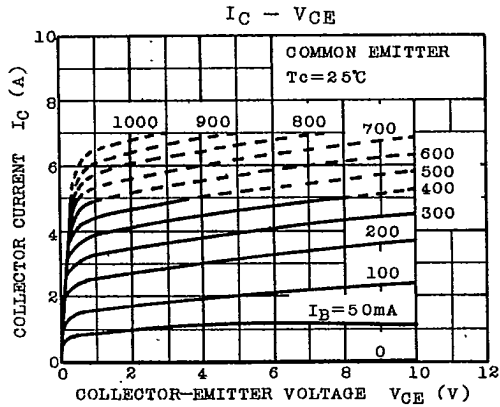
Note : Pulse Test : Pulse Width  $\leq 300\mu s$ , Duty Cycle  $\leq 2\%$

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