

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07776 DT-33-13

SILICON NPN TRIPLE DIFFUSED TYPE

2SD717

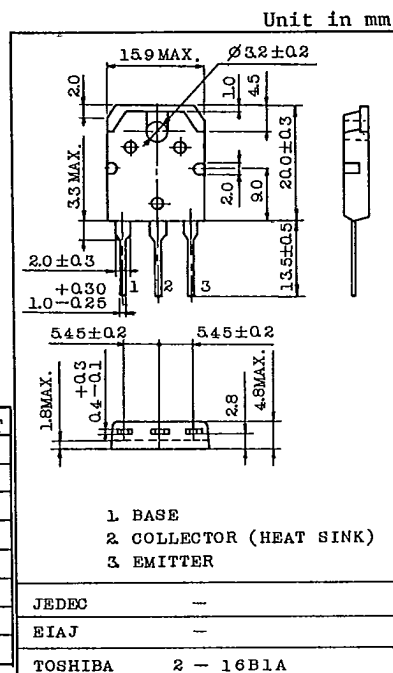
HIGH POWER SWITCHING APPLICATIONS.
DC-DC CONVERTER AND DC-AC INVERTER
APPLICATIONS.

FEATURES:

- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.4V$ (Max.), ($I_C=6A$)
- High Collector Power Dissipation : $P_C=80W$ ($T_c=25^\circ C$)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	10	A
Base Current	I_B	2	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 : 4.6 g

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=70V, I_E=0$	-	-	10	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	50	-	-	V
DC Current Gain		$h_{FE(1)}$ (Note)	$V_{CE}=1V, I_C=1A$	70	-	240	
		$h_{FE(2)}$	$V_{CE}=1V, I_C=6A$	30	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=6A, I_B=0.3A$	-	0.25	0.4	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=6A, I_B=0.3A$	-	0.9	1.2	V
Transition Frequency		f_T	$V_{CE}=4V, I_C=1A$	-	10	-	MHz
Collector Output Capacitance		C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	350	-	pF
Switching Time	Turn-on Time	t_{on}		-	0.3	-	μs
	Storage Time	t_{stg}		-	2.5	-	
	Fall Time	t_f		-	0.4	-	

Note : $h_{FE(1)}$ Classification 0 : 70~140, Y : 120~240

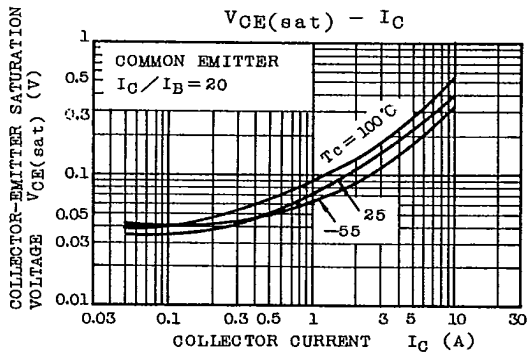
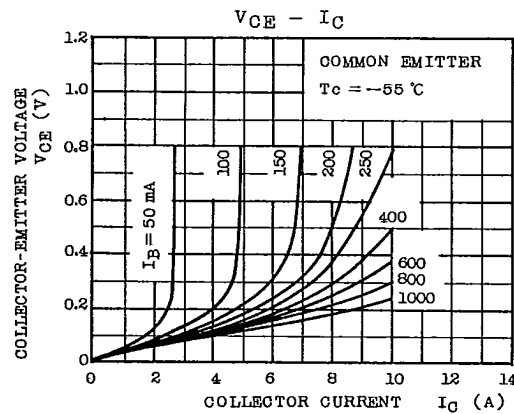
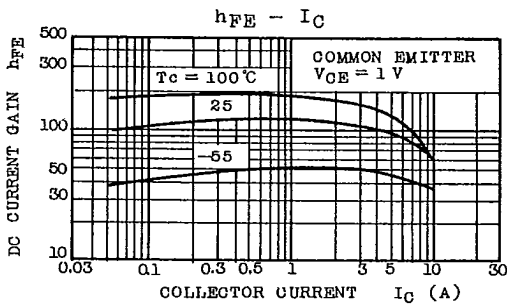
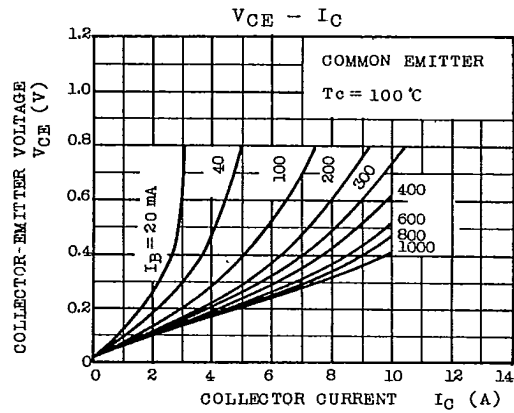
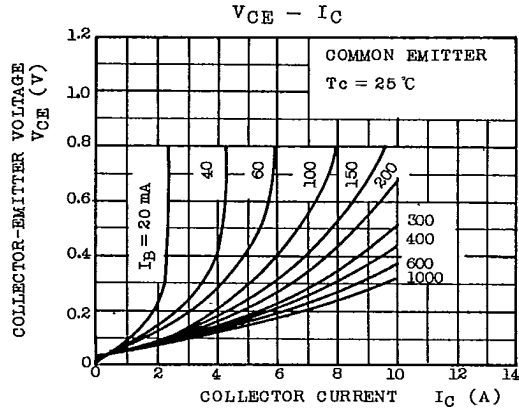
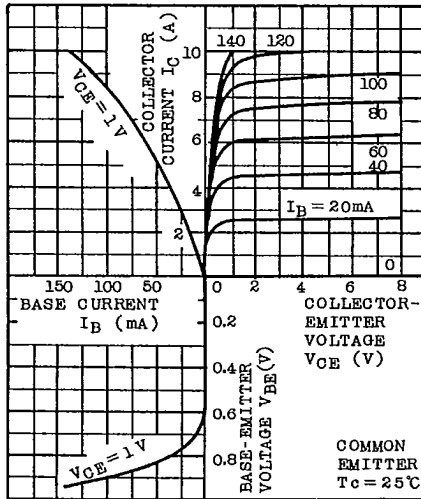
TOSHIBA CORPORATION

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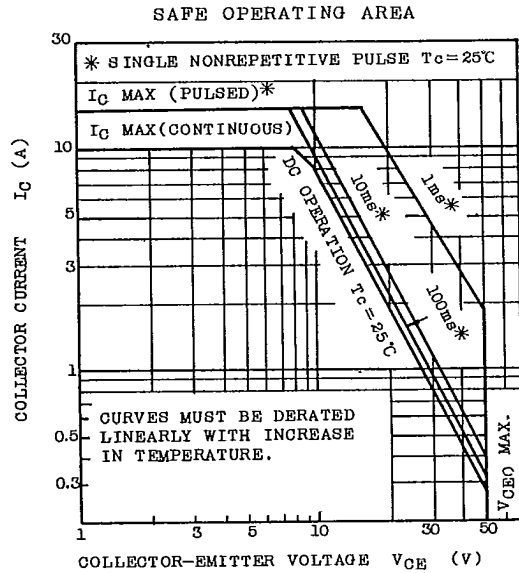
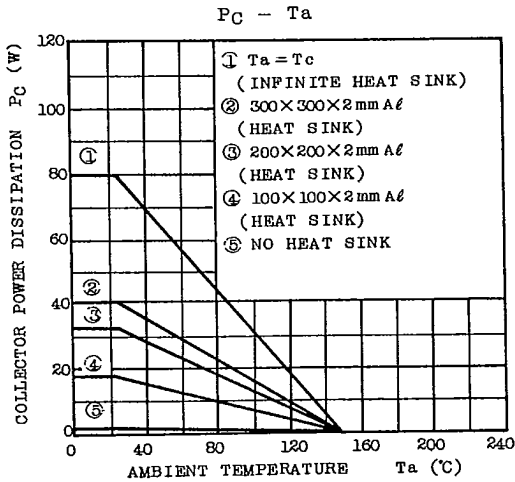
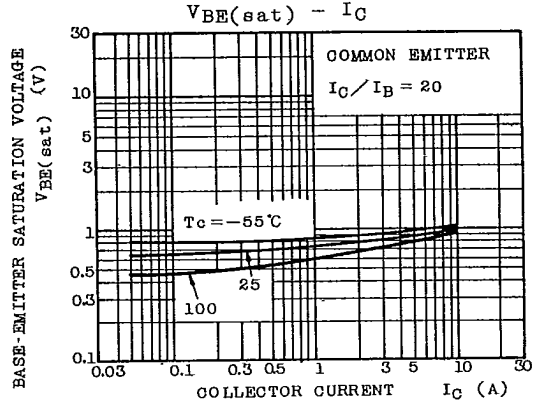
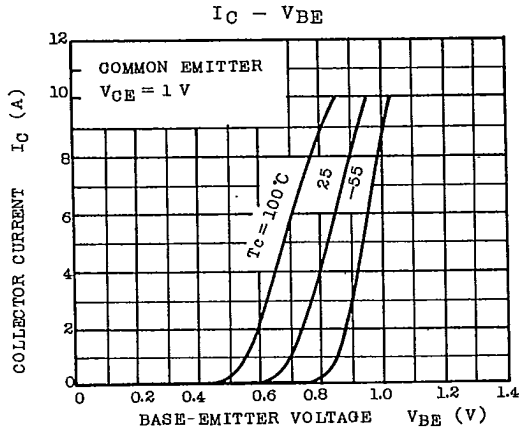
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STATIC CHARACTERISTICS



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