

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07817

DT-33-11

2SD844

SILICON NPN TRIPLE DIFFUSED TYPE

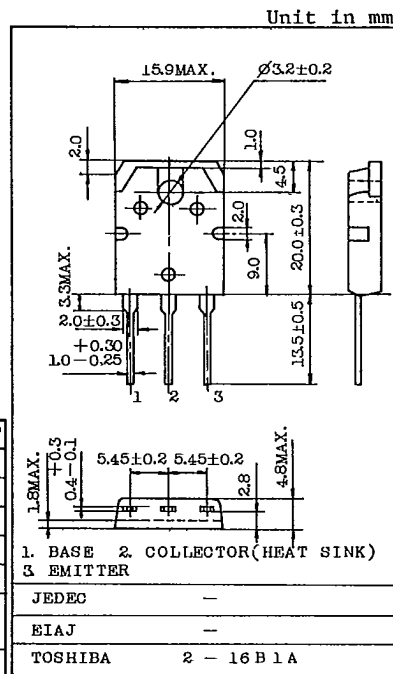
HIGH CURRENT SWITCHING APPLICATIONS.
POWER AMPLIFIER APPLICATION.

FEATURES:

- High Collector Current : $I_C=7A$
- Low Collector Saturation Voltage
: $V_{CE(sat)}=0.4V(\text{Max.})$ (at $I_C=4A$)
- High Power dissipation : $P_C=60W$ (at $T_c=25^\circ C$)
- Complementary to 2SB754.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CE0}	50	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	7	A
Emitter Current	I_E	-7	A
Collector Power Dissipation	P_C	$T_a=25^\circ C$	2.5
		$T_c=25^\circ C$	60
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



Weight : 4.6g

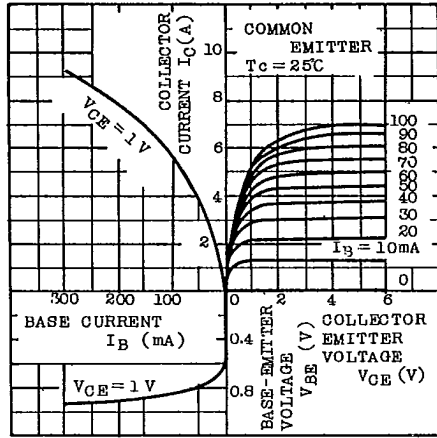
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=50V, I_E=0$	-	-	10	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C=50mA, I_B=0$	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=10mA, I_C=0$	5	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=1V, I_C=1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE}=1V, I_C=4A$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4A, I_B=0.4A$	-	0.2	0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=1V, I_C=4A$	-	0.9	1.2	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	15	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	250	-	pF

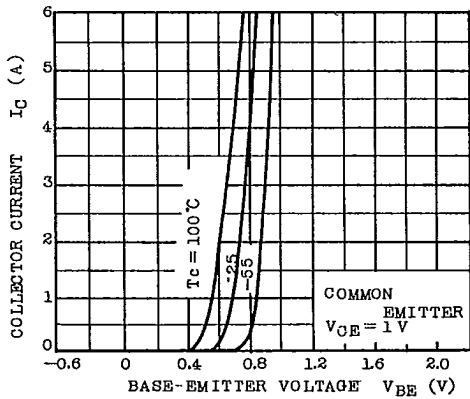
Note : $h_{FE(1)}$ Classification O : 70 ~ 140, Y : 120 ~ 240

TOSHIBA CORPORATION

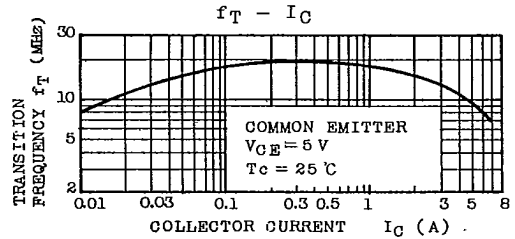
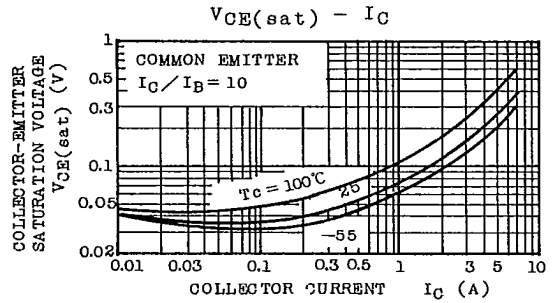
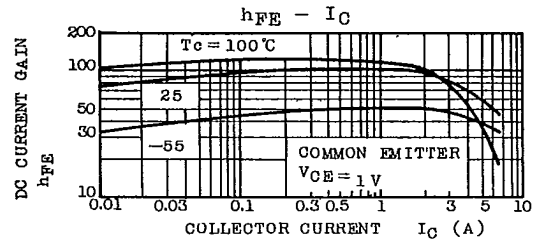
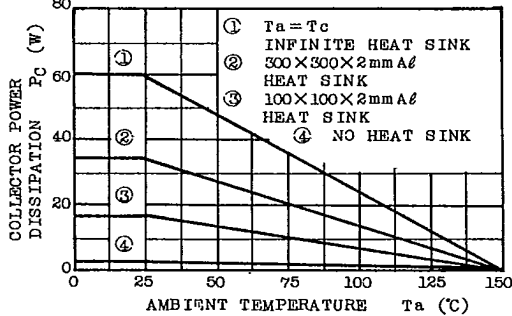
STATIC CHARACTERISTICS



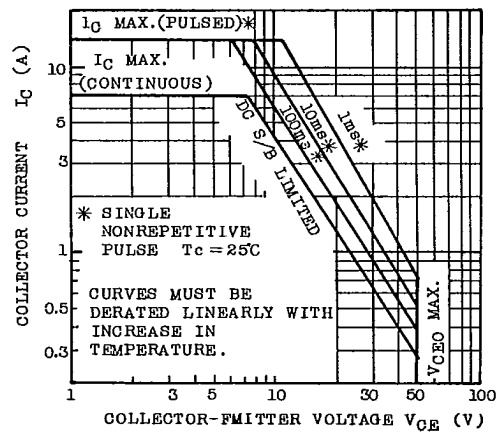
IC - VBE



PC - Ta



SAFE OPERATING AREA



TOSHIBA CORPORATION