

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07814 D T-33-11

SILICON NPN TRIPLE DIFFUSED TYPE

2SD843

INDUSTRIAL APPLICATIONS

Unit in mm

HIGH CURRENT SWITCHING APPLICATIONS.

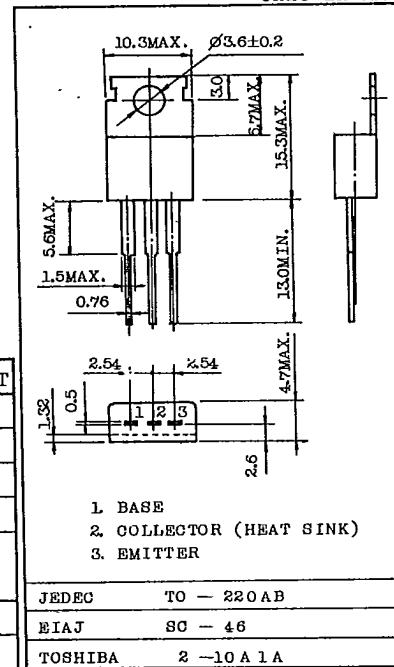
POWER AMPLIFIER APPLICATIONS.

FEATURES:

- Low Saturation Voltage
: $V_{CE(sat)}=0.5V$ (Max.) (at $I_C=4A$)
- Complementary to 2SB753.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	7	A
Collector Power Dissipation	P_C	$T_a=25^\circ C$	1.5
		$T_c=25^\circ C$	40
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$



Mounting Kit No. AC75

Weight : 1.9g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector Cut-off Current	I_{CBO}	$V_{CB}=100V, I_E=0$	-	-	5	μA	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	5	μA	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	80	-	-	V	
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=1V, I_C=1A$	70	-	240		
		$V_{CE}=1V, I_C=4A$	30	-	-		
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	-	0.25	0.5	V	
	Base-Emitter	$V_{BE(sat)}$	-	0.9	1.4		
Transition Frequency	f_T	$V_{CE}=4V, I_C=1A$	-	10	-	MHz	
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	250	-	pF	
Switching Time	Turn-on Time	t_{on}			-	0.4	-
	Storage Time	t_{stg}			-	2.5	-
	Fall Time	t_f			-	0.5	-

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

TOSHIBA CORPORATION

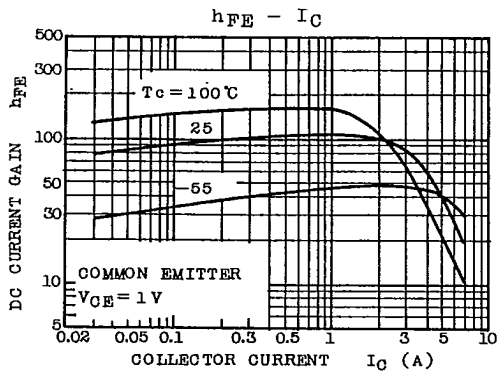
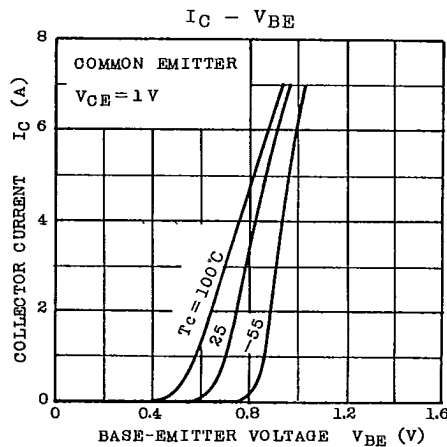
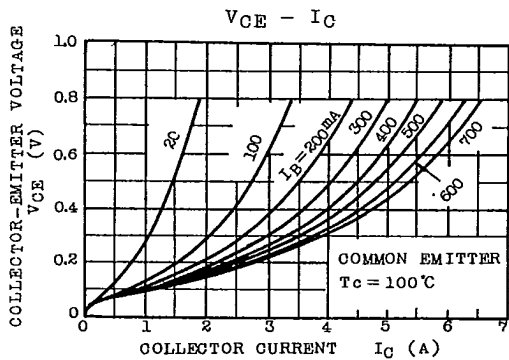
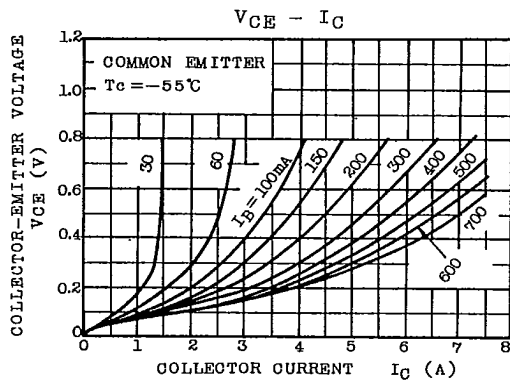
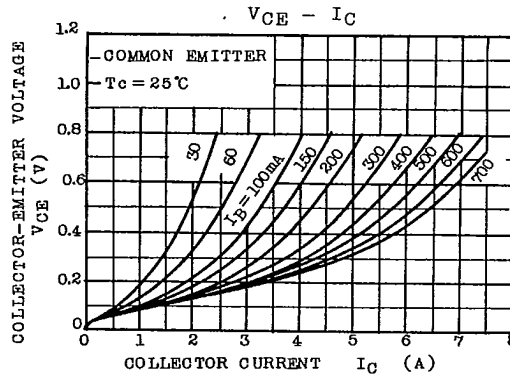
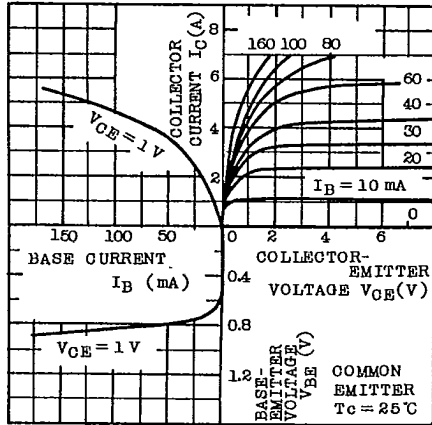
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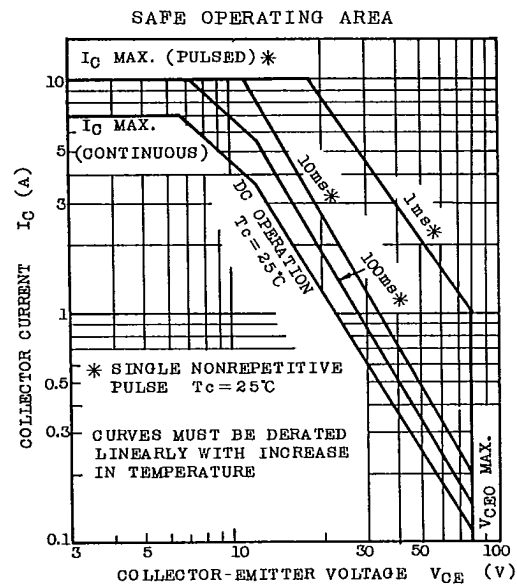
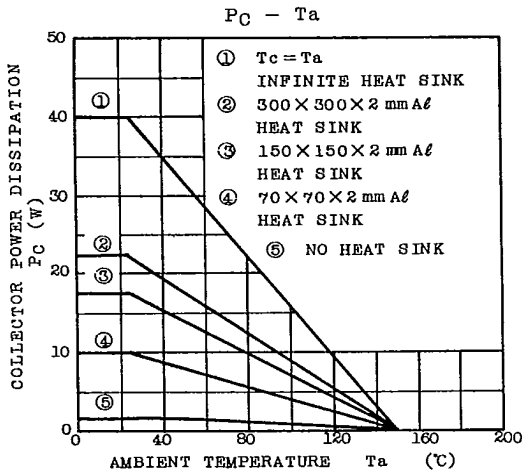
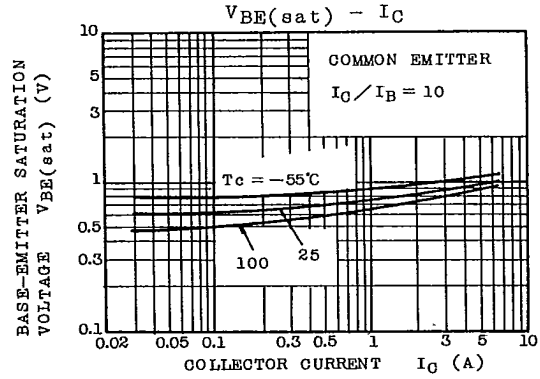
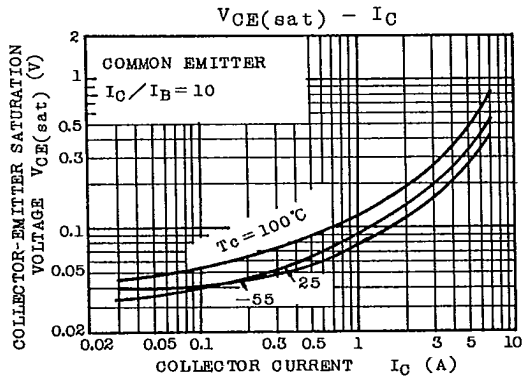
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STATIC CHARACTERISTICS



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