

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07844 07-33-09

SILICON NPN TRIPLE DIFFUSED TYPE

**2SD880**

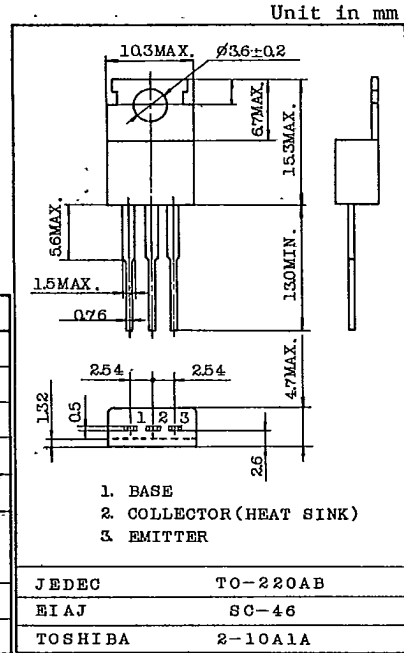
AUDIO FREQUENCY POWER AMPLIFIER APPLICATIONS.

FEATURES :

- . High DC Current Gain  
:  $h_{FE}=300$  (Max.) ( $V_{CE}=5V, I_C=0.5A$ )
- . Low Saturation Voltage  
:  $V_{CE(sat)}=1.0V$  (Max.) ( $I_C=3A, I_B=0.3A$ )
- . High Power Dissipation :  $P_C=30W$  ( $T_c=25^\circ C$ )
- . Complementary to 2SB834.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector Current	$I_C$	3	A
Base Current	$I_B$	0.5	A
Collector Power Dissipation	$T_j$	$T_a=25^\circ C$	1.5
		$T_c=25^\circ C$	30
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ C$



Mounting kit No. AC75  
Weight : 1.9g

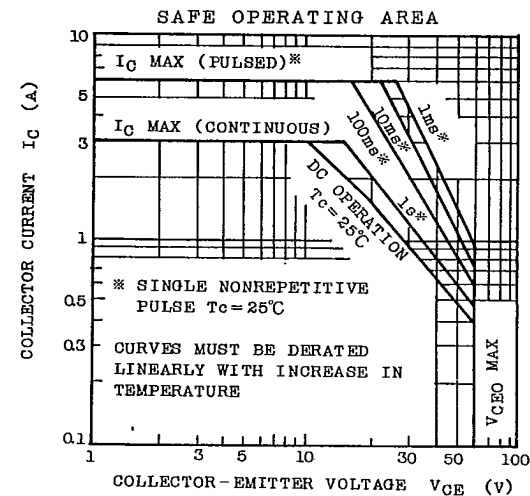
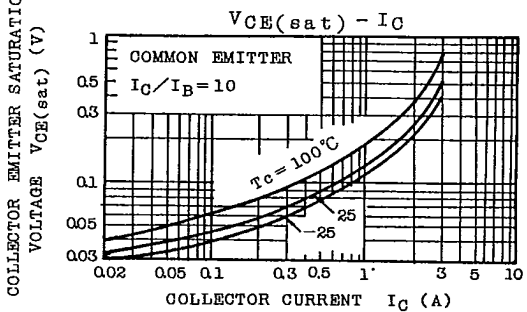
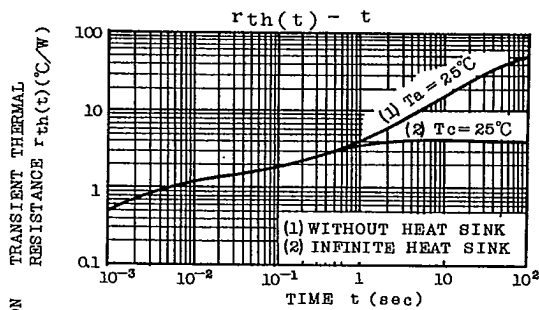
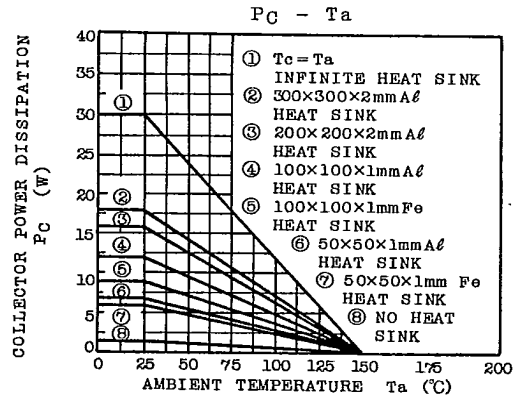
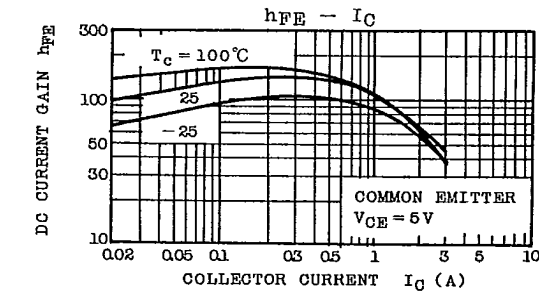
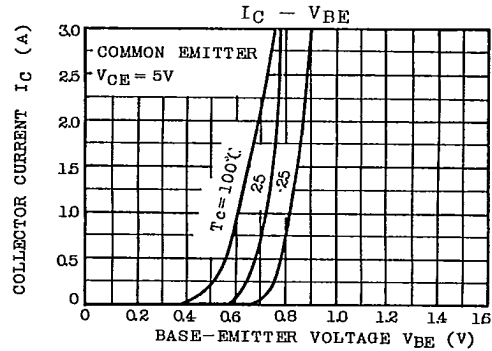
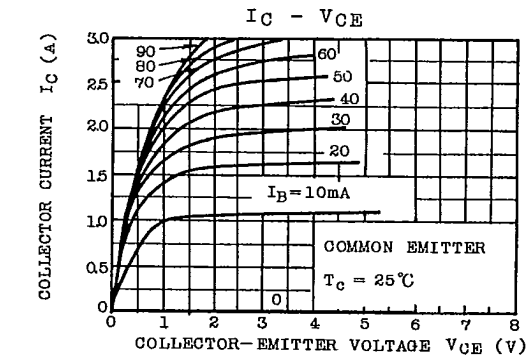
ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=60V, I_E=0$	-	-	100	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	100	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	60	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE}=5V, I_C=0.5A$ (Note)	60	-	300	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=0.3A$	-	0.25	1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=5V, I_C=0.5A$	-	0.7	1.0	V
Transition Frequency	$f_T$	$V_{CE}=5V, I_C=0.5A$	-	3.0	-	MHz
Collector Output Capacitance	$C_{cb}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	70	-	pF
Switching Time	Turn-on Time	$t_{on}$	-	0.8	-	$\mu s$
	Storage Time	$t_{stg}$	-	1.5	-	
	Fall Time	$t_f$	-	0.8	-	

Note:  $h_{FE}$  Classification 60~120, Y : 100~200, GR: 150~300.

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