

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07263 D7 33-23

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

**2SA1146**

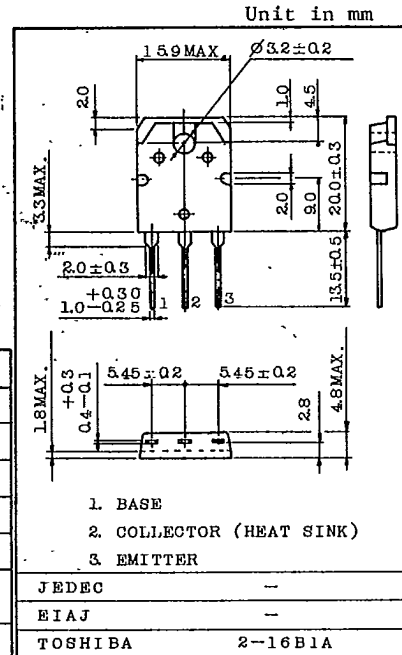
AUDIO FREQUENCY LOW POWER AMPLIFIER  
APPLICATIONS.

## FEATURES:

- Complementary to 2SC2706.
- Recommended for 70W audio frequency amplifier output stage.
- High transition frequency :  $f_T=70\text{MHz}$  (Typ.)

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-140	V
Collector-Emitter Voltage	$V_{CEO}$	-140	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-10	A
Base Current	$I_B$	-1	A
Collector Power Dissipation ( $T_c=25^\circ\text{C}$ )	$P_C$	100	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



Weight : 4.6g

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=-140\text{V}, I_B=0$	-	-	-50	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-5\text{V}, I_C=0$	-	-	-50	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-50\text{mA}, I_B=0$	-140	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=-5\text{V}, I_C=-1\text{A}$	55	-	240	
	$h_{FE(2)}$	$V_{CE}=-5\text{V}, I_C=-5\text{A}$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-5\text{A}, I_B=-0.5\text{A}$	-	-	-2.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE}=-5\text{V}, I_C=-5\text{A}$	-	-	-2.5	V
Transition Frequency	$f_T$	$V_{CE}=-10\text{V}, I_C=-1\text{A}$	-	70	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$	-	220	-	pF

Note:  $h_{FE}$  Classification R:55~110, O:80~160, Y:120~240

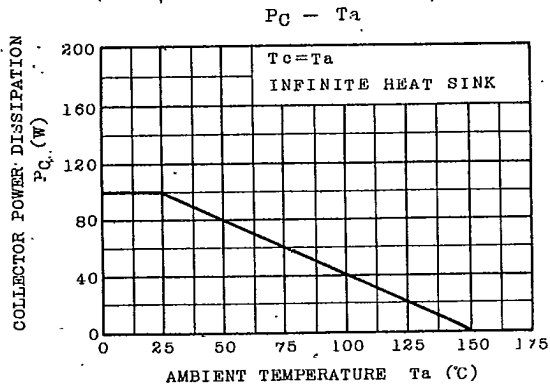
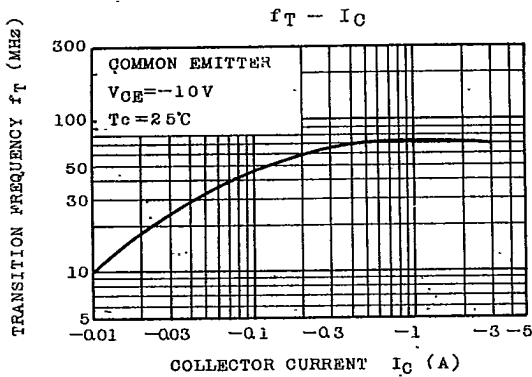
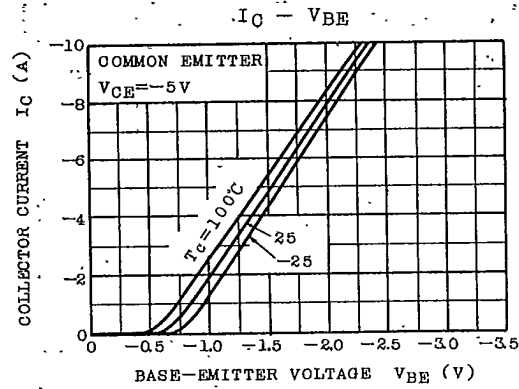
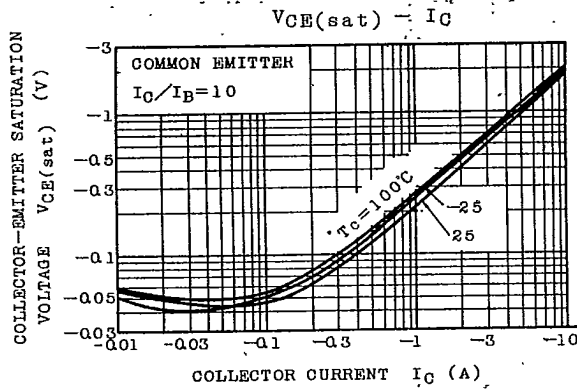
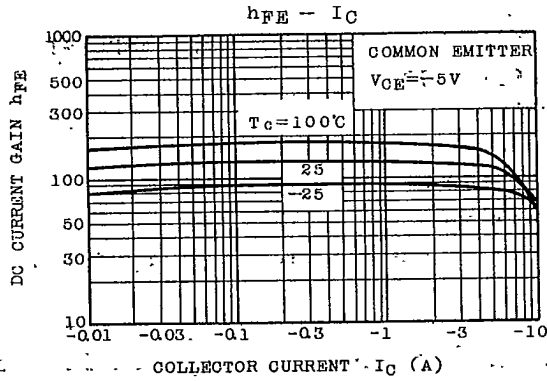
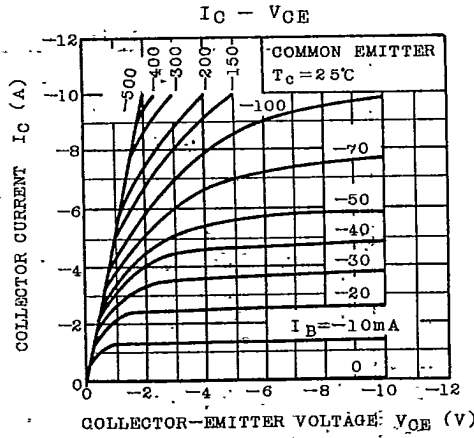
TOSHIBA CORPORATION

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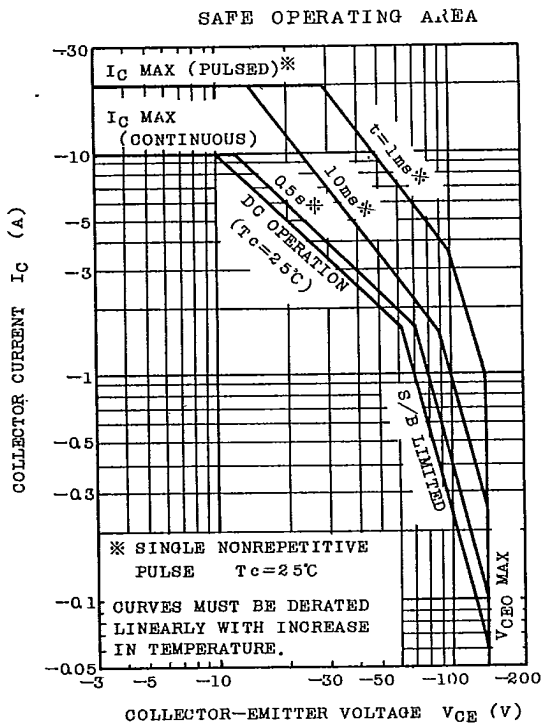
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