

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

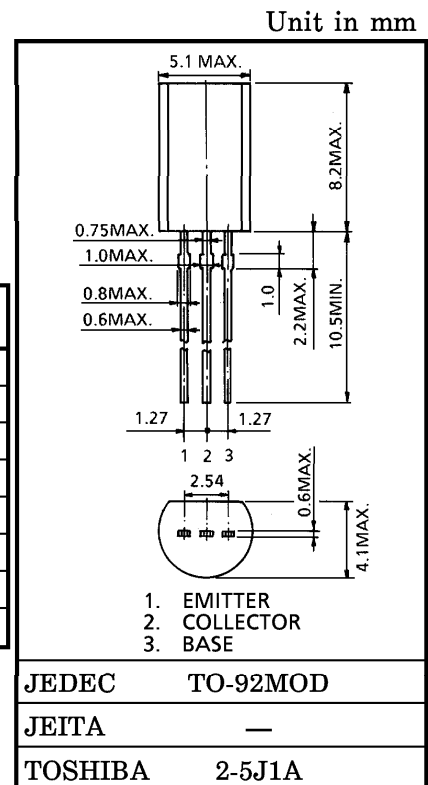
## 2SA966

AUDIO POWER AMPLIFIER APPLICATIONS

- Complementary to 2SC2236 and 3 W Output Applications.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CB0}$	-30	V
Collector-Emitter Voltage	$V_{CEO}$	-30	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-1.5	A
Emitter Current	$I_E$	1.5	A
Collector Power Dissipation	$P_C$	900	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55~150	$^\circ\text{C}$

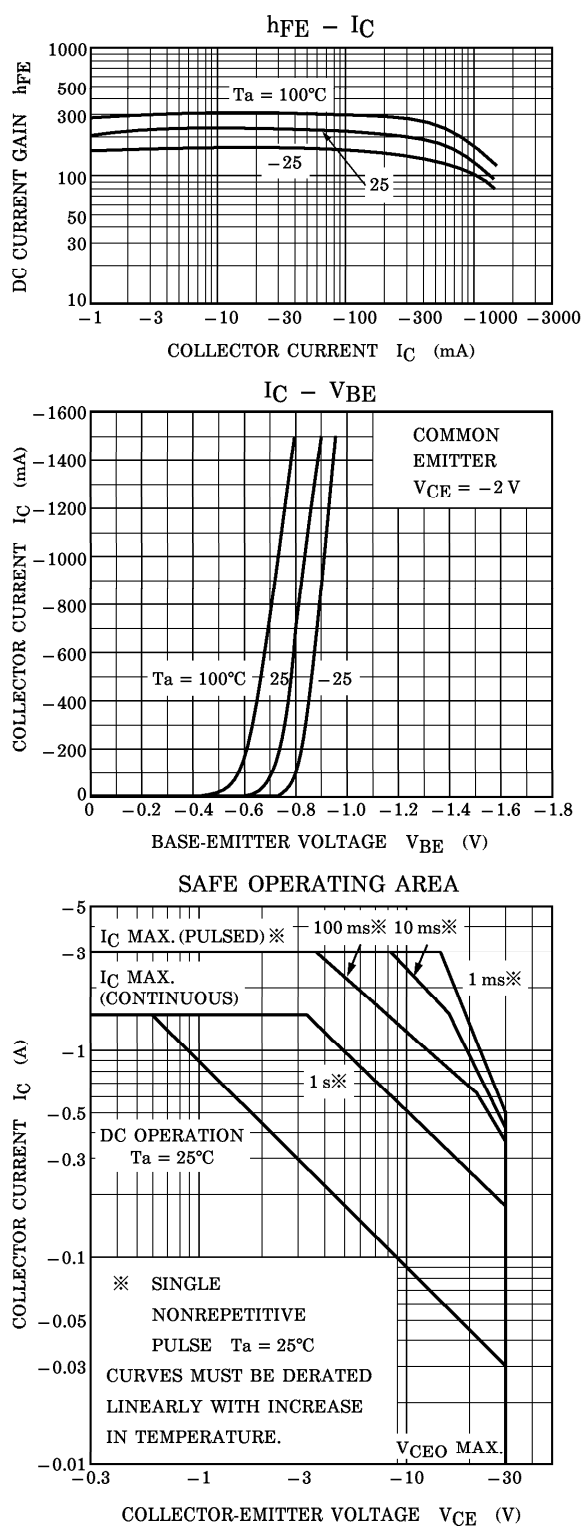
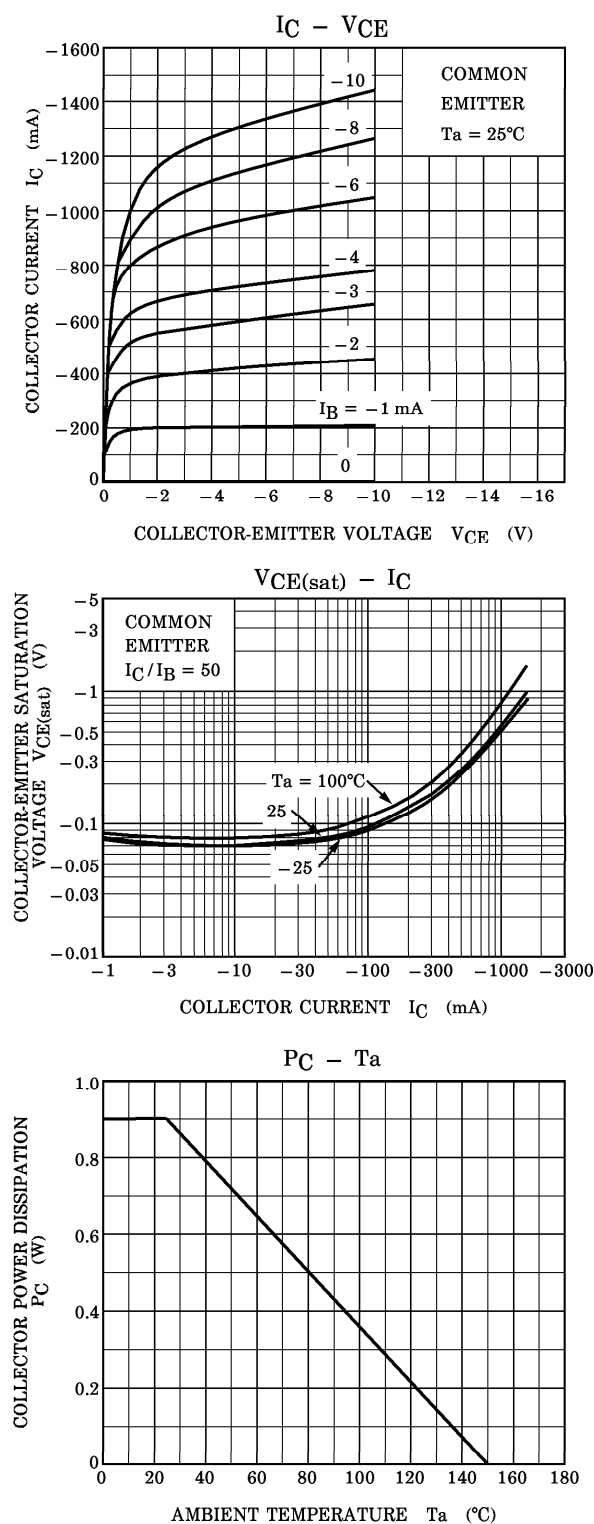


Weight : 0.36 g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -30\text{ V}, I_E = 0$	—	—	-100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5\text{ V}, I_C = 0$	—	—	-100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10\text{ mA}, I_B = 0$	-30	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = -1\text{ mA}, I_C = 0$	-5	—	—	V
DC Current Gain	$h_{FE}$ (Note)	$V_{CE} = -2\text{ V}, I_C = -500\text{ mA}$	100	—	320	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -1.5\text{ A}, I_B = -0.03\text{ A}$	—	—	-2.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -2\text{ V}, I_C = -500\text{ mA}$	—	—	-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -2\text{ V}, I_C = -500\text{ mA}$	—	120	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{ V}, I_E = 0,$ $f = 1\text{ MHz}$	—	40	—	pF

(Note) :  $h_{FE}$  Classification    O : 100~200,    Y : 160~320



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