

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

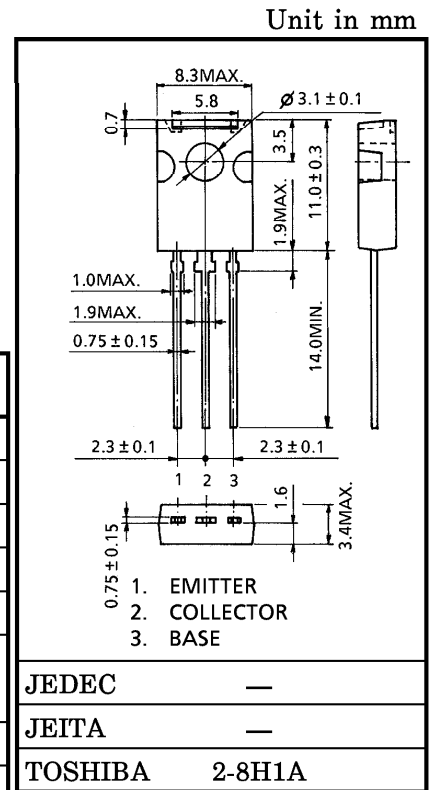
2SA1356

AUDIO POWER AMPLIFIER APPLICATIONS

- Low Saturation Voltage
: $V_{CE(sat)} = -0.32V$ (Typ.) ($I_C = -500mA$, $I_B = -50mA$)
- High Collector Power Dissipation : $P_C = 1.2W$ ($T_a = 25^\circ C$)
- Complementary to 2SC3419

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-40	V
Collector-Emitter Voltage	V_{CEO}	-40	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-800	mA
Base Current	I_B	-80	mA
Collector Power Dissipation	P_C	1.2	W
		5	
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

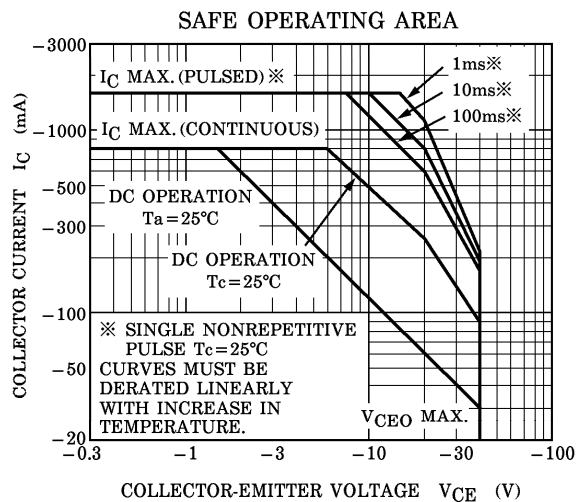
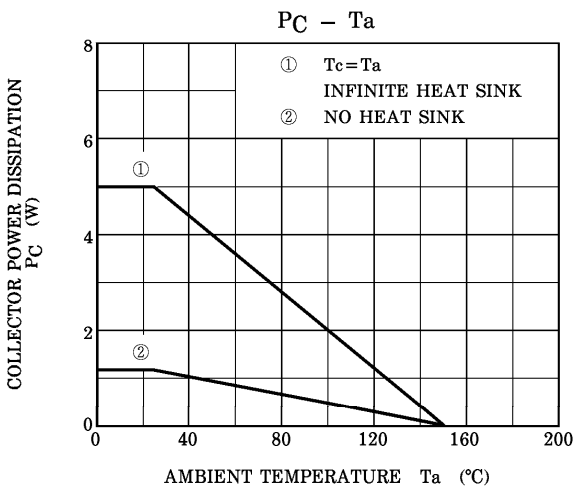
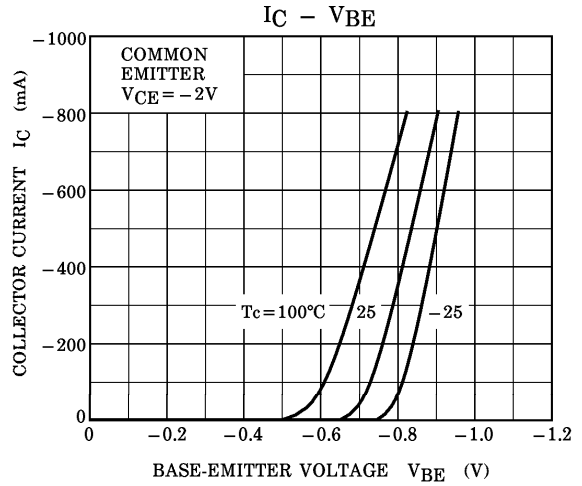
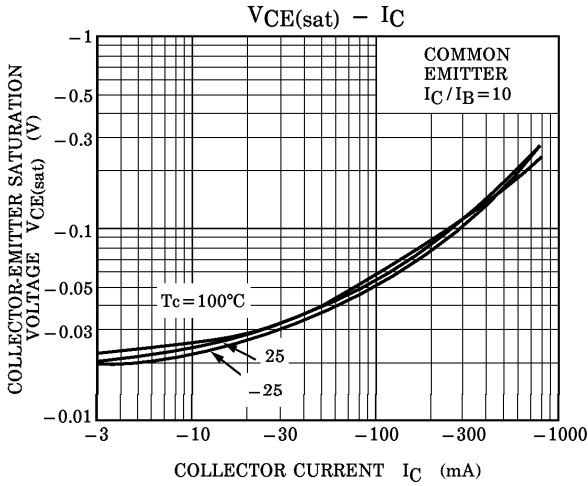
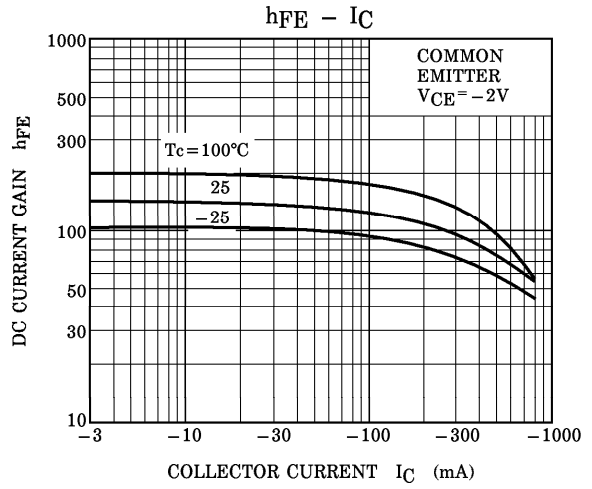
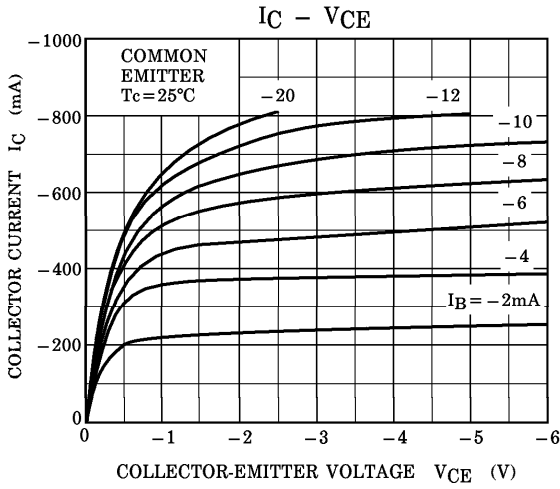


Weight : 0.82g (Typ.)

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CB0}	$V_{CB} = -40V$, $I_E = 0$	—	—	-1.0	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	—	—	-1.0	μA
Collector-Emitter Breakdown Voltage	V_{CEO}	$I_C = -10mA$, $I_B = 0$	-40	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -2V$, $I_C = -50mA$	70	—	240	
	$h_{FE(2)}$	$V_{CE} = -2V$, $I_C = -800mA$	13	50	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA$, $I_B = -50mA$	—	-0.32	-0.8	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V$, $I_C = -500mA$	—	—	-1.3	V
Transition Frequency	f_T	$V_{CE} = -2V$, $I_C = -0.5A$	50	100	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V$, $I_E = 0$, $f = 1MHz$	—	20	—	pF

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



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