

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2SA1202

POWER AMPLIFIER APPLICATIONS

VOLTAGE AMPLIFIER APPLICATIONS

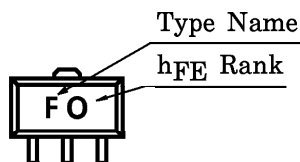
- Suitable for driver of 30~35 Watts Audio Amplifier
- $P_C = 1 \sim 2W$ (Mounted on Ceramic Substrate)
- Small Flat Package
- Complementary to 2SC2882

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-80	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-400	mA
Base Current	I_B	-80	mA
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation	P_C^*	1000	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

 P_C^* : Mounted on ceramic substrate ($250mm^2 \times 0.8t$)

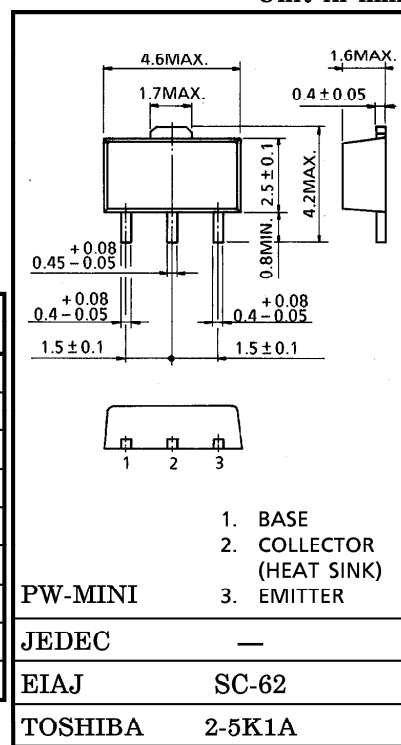
Marking

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -80V, I_E = 0$	—	—	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-80	—	—	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -2V, I_C = -50mA$	70	—	240	
	$h_{FE(2)}$	$V_{CE} = -2V, I_C = -200mA$	40	—	—	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -200mA, I_B = -20mA$	—	—	-0.4	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = -2V, I_C = -5mA$	-0.55	—	-0.8	V
Transition Frequency	f_T	$V_{CE} = -10V, I_C = -10mA$	—	120	—	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	14	—	pF

Note : h_{FE} Classification O : 70~140, Y : 120~240

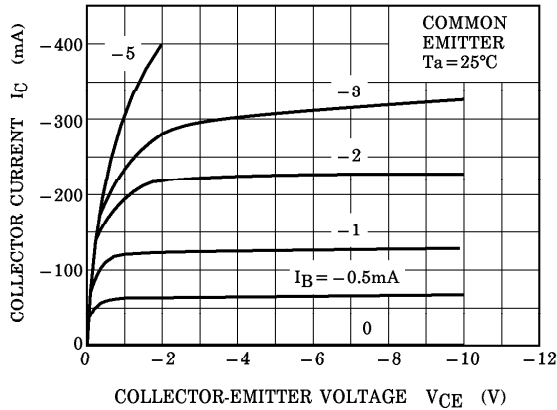
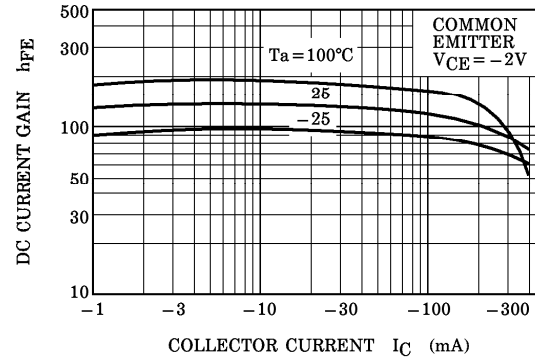
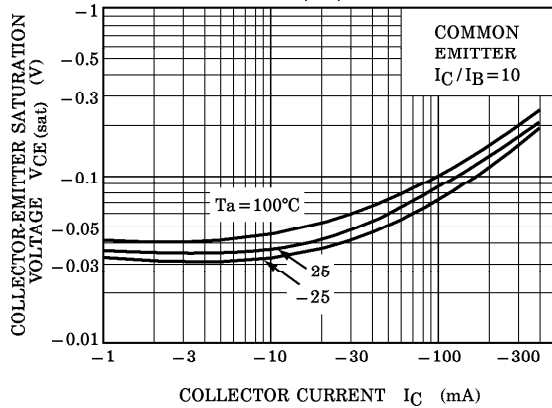
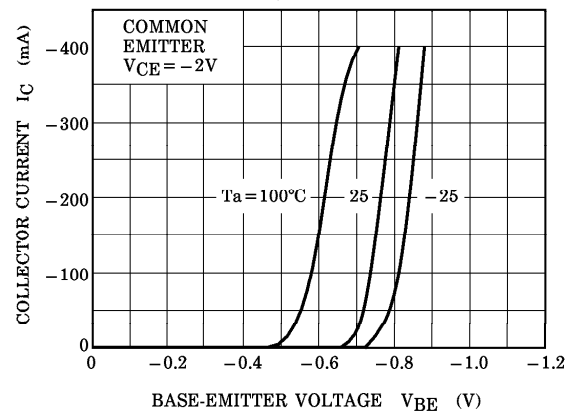
Unit in mm



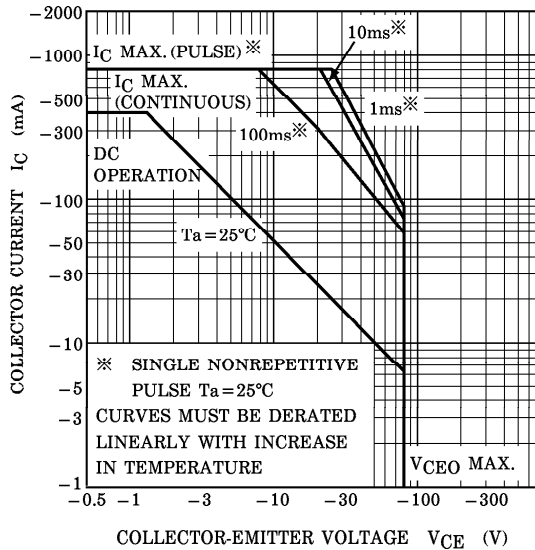
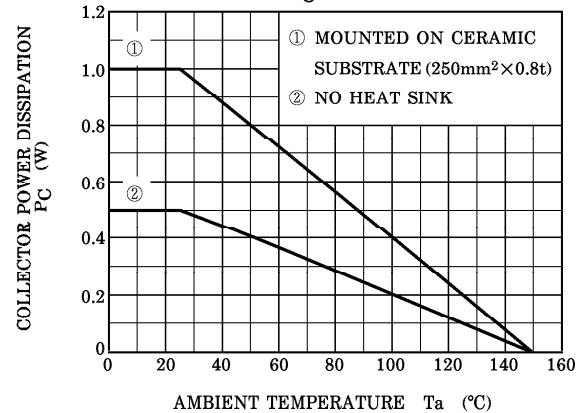
Weight : 0.05g

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$I_C - V_{CE}$  $h_{FE} - I_C$  $V_{CE(\text{sat})} - I_C$  $I_C - V_{BE}$ 

SAFE OPERATING AREA

 $P_C - T_a$ 

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