

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2SA1201

**POWER AMPLIFIER APPLICATIONS**

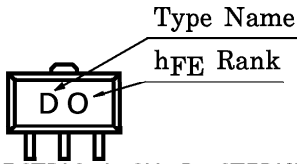
- High Voltage :  $V_{CEO} = -120V$
- High Transition Frequency :  $f_T = 120MHz$  (Typ.)
- $P_C = 1-2W$  (Mounted on Ceramic Substrate)
- Small Flat Package
- Complementary to 2SC2881

**MAXIMUM RATINGS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-120	V
Collector-Emitter Voltage	$V_{CEO}$	-120	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-800	mA
Base Current	$I_B$	-160	mA
Collector Power Dissipation	$P_C$	500	mW
Collector Power Dissipation	$P_C^*$	1000	mW
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

$P_C^*$  : Mounted on ceramic substrate (250mm<sup>2</sup> × 0.8t)

**Marking**

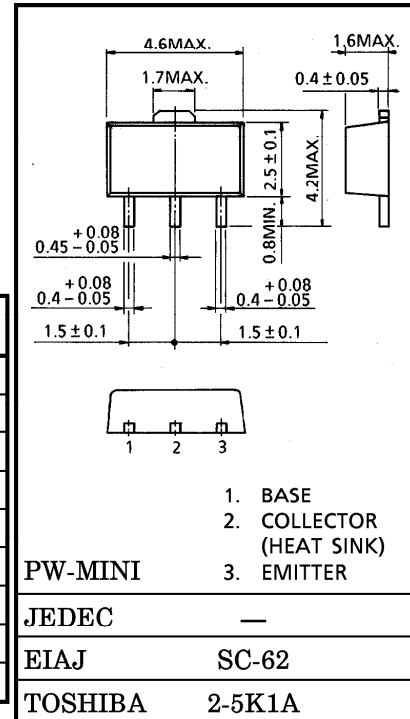


**ELECTRICAL CHARACTERISTICS (Ta = 25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -120V, I_E = 0$	—	—	-0.1	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	—	—	-0.1	$\mu A$
Collector-Emitter Breakdown Voltage	$V_{(BR) CEO}$	$I_C = -10mA, I_B = 0$	-120	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR) EBO}$	$I_E = -1mA, I_C = 0$	-5	—	—	V
DC Current Gain	$h_{FE}$ (Note)	$V_{CE} = -5V, I_C = -100mA$	80	—	240	
Collector-Emitter Saturation Voltage	$V_{CE (sat)}$	$I_C = -500mA, I_B = -50mA$	—	—	-1.0	V
Base-Emitter Voltage	$V_{BE}$	$V_{CE} = -5V, I_C = -500mA$	—	—	-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -5V, I_C = -100mA$	—	120	—	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	—	—	30	pF

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

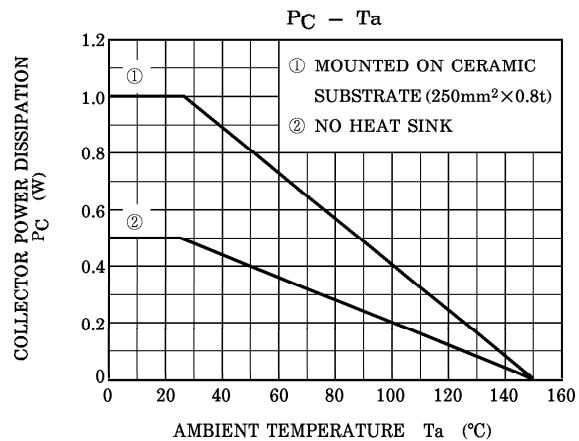
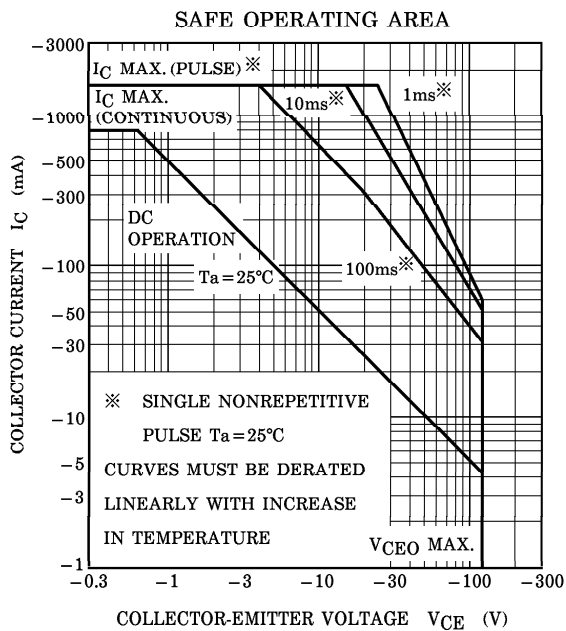
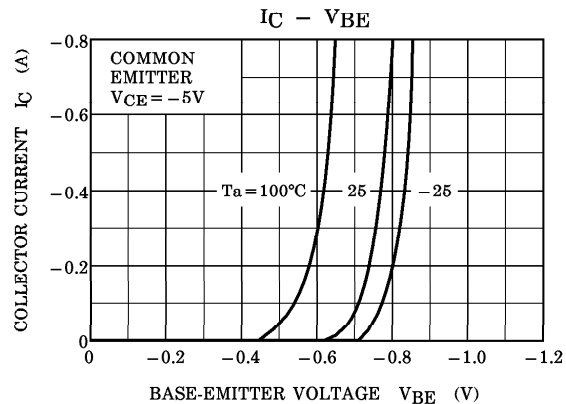
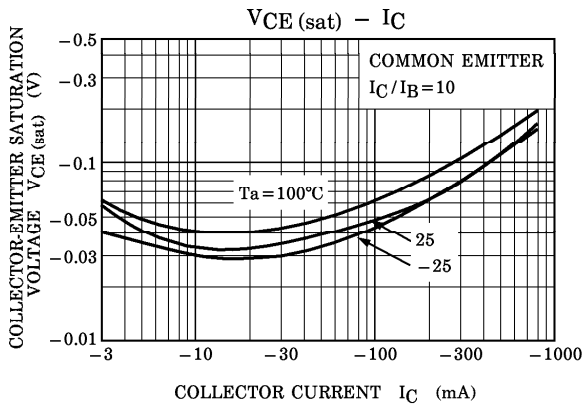
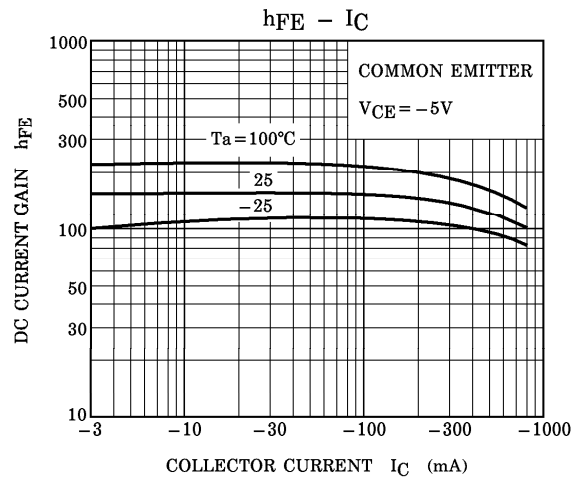
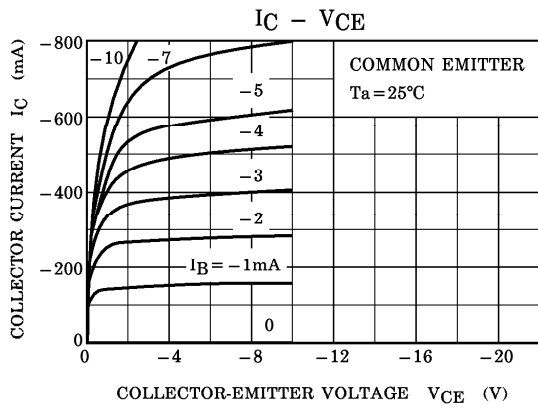
Unit in mm



Weight : 0.05g

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