

TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2SC2881

POWER AMPLIFIER APPLICATIONS.

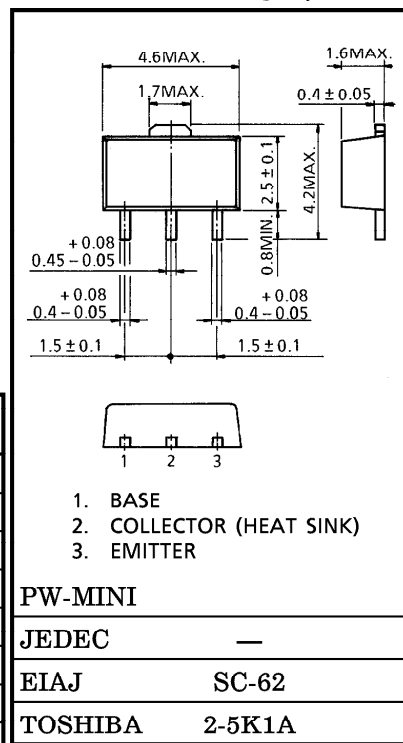
- High Voltage : $V_{CEO} = 120V$
- High Transition Frequency : $f_T = 120MHz$ (Typ.)
- $P_C = 1 \sim 2W$ (Mounted Ceramic Substrate)
- Small Flat Package
- Complementary to 2SA1201

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

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 (Note)	1000	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55~150	$^\circ C$

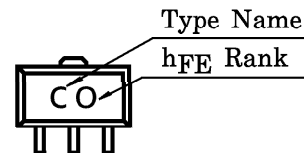
Note : Mounted on ceramic substrate ($250mm^2 \times 0.8t$)

Unit in mm



Weight : 0.05g

Marking



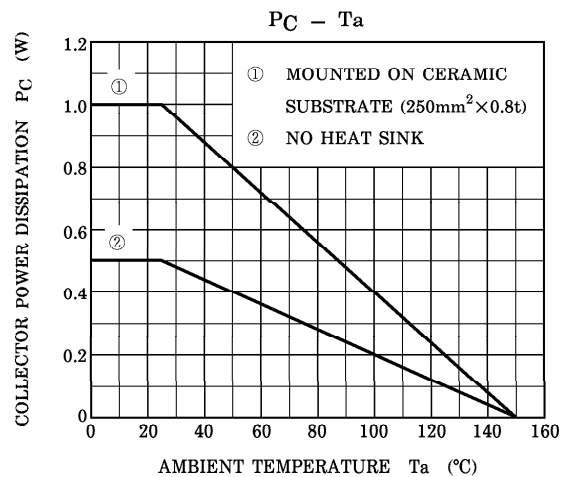
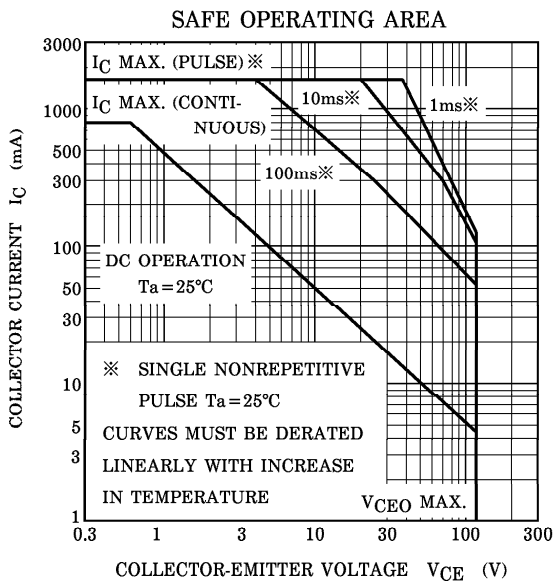
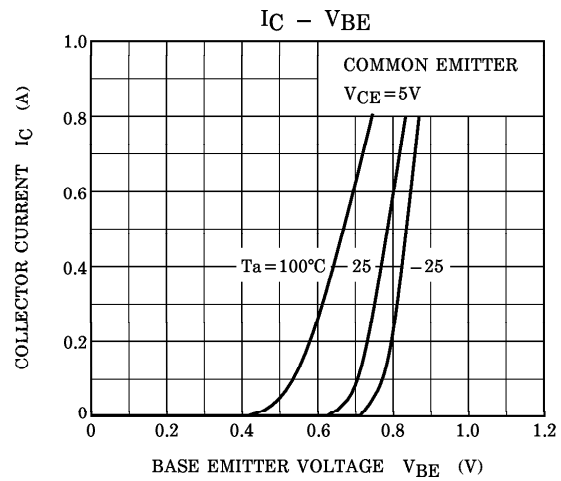
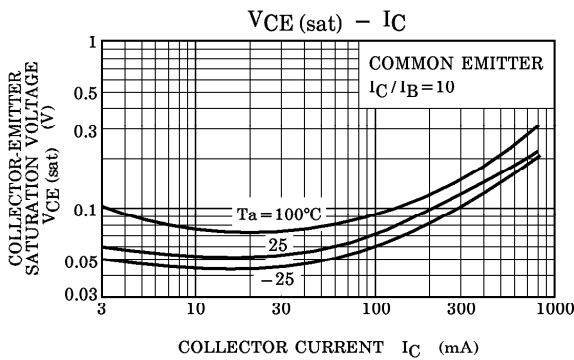
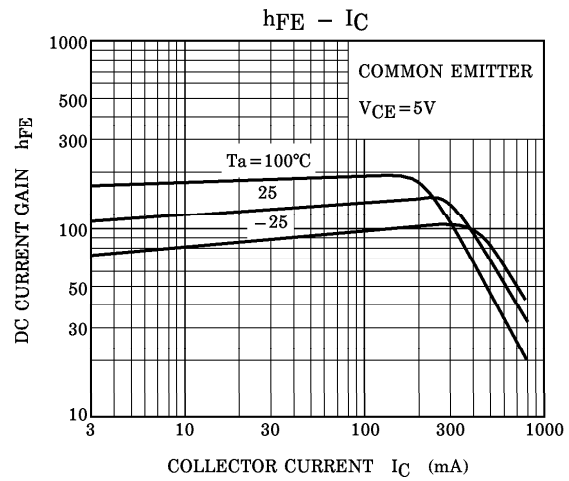
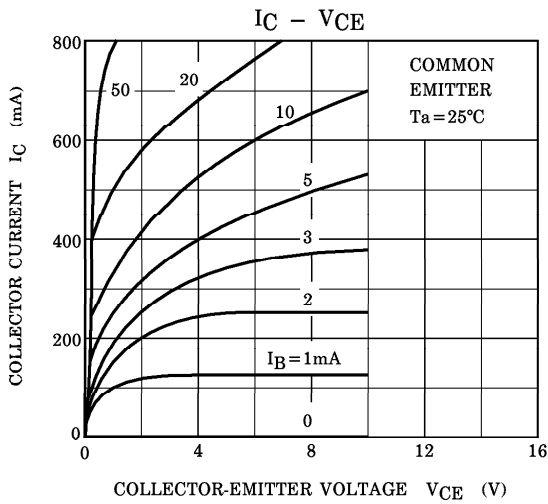
ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 120V, I_E = 0$	—	—	0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	—	—	0.1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	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

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