TOSHIBA 2SA1200

TOSHIBA TRANSISTOR SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

# 2 S A 1 2 0 0

### HIGH VOLTAGE SWITCHING APPLICATIONS

• High Voltage :  $V_{CEO} = -150V$ 

• High Transition Frequency: f<sub>T</sub>=120MHz(Typ.)

• PC=1~2W (Mounted on Ceramic Substrate)

• Small Flat Package

• Complementary to 2SC2880

### MAXIMUM RATINGS (Ta = 25°C)

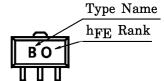
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$v_{CBO}$	-150	V
Collector-Emitter Voltage	$v_{CEO}$	-150	V
Emitter-Base Voltage	$V_{ m EBO}$	-5	V
Collector Current	$I_{\mathbf{C}}$	-50	mA
Base Current	$I_{\mathbf{B}}$	-10	mA
Collector Power Dissipation	$P_{\mathbf{C}}$	500	mW
Collector Power Dissipation	P <sub>C</sub> (Note 1)	800	mW
Junction Temperature	$T_{j}$	150	°C
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C

(Note 1): 2SA1200 mounted on ceramic substrate (250mm $^2 \times 0.8t$ )

## Unit in mm 1,6MAX. 4.6MAX $0.4 \pm 0.05$ 0.45 - 0.08 0.45 - 0.05 + 0.08 0.4 - 0.05 1.5 ± 0.1 1. BASE **COLLECTOR** (HEAT SINK) PW-MINI 3. EMITTER **JEDEC JEITA** SC-62 TOSHIBA 2-5K1A

Weight: 0.05g (Typ.)

Marking

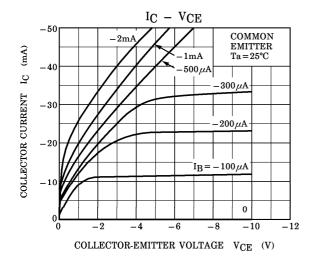


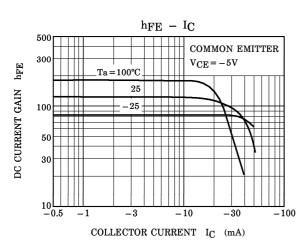
### ELECTRICAL CHARACTERISTICS (Ta = 25°C)

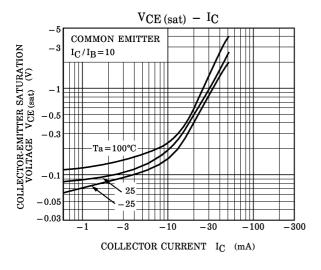
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{\mathrm{CBO}}$	$V_{CB} = -150V, I_E = 0$		_	-0.1	$\mu$ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5V, I_C = 0$	_	_	-0.1	$\mu$ A
DC Current Gain	hFE (Note 2)	$V_{CE} = -5V, I_{C} = -10mA$	70	_	240	
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)	$I_C = -10 \text{mA}, I_B = -1 \text{mA}$	_	_	-0.8	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -5V, I_{C} = -30mA$	_	_	-0.9	V
Transition Frequency	${f f_T}$	$V_{CE} = -30V, I_{C} = -10mA$	_	120	_	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CE} = -10V, I_{E} = 0, f = 1MHz$	_	4.0	5.0	pF

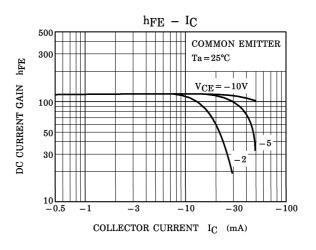
(Note 2): hFE Classification O: 70~140, Y: 120~240

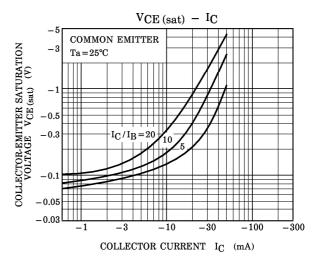
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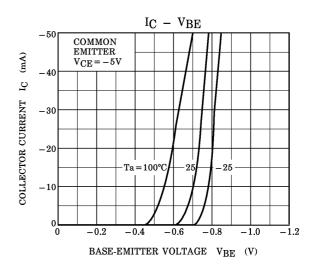




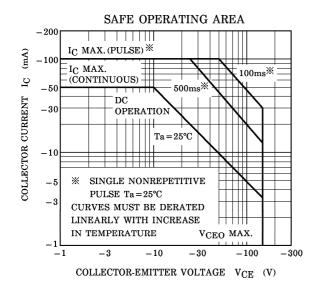


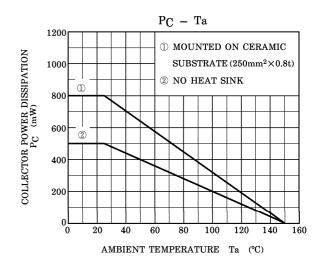






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