TOSHIBA 2SA1203

TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2 S A 1 2 0 3

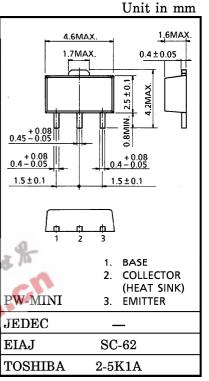
AUDIO FREQUENCY AMPLIFIER APPLICATIONS

- Suitable for Output Stage of 3 Watts Amplifier
- PC=1~2W (Mounted on Ceramic Substrate)
- Small Flat Package
- Complementary to 2SC2883

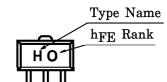
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	v_{CBO}	-30	V	
Collector-Emitter Voltage	v_{CEO}	-30	V	
Emitter-Base Voltage	$v_{ m EBO}$	-5	V	
Collector Current	$I_{\mathbf{C}}$	-1.5	A	
Base Current	$I_{\mathbf{B}}$	-0.3	A	
Collector Power Dissipation	PC	500	mW	
Collector Power Dissipation	P _C *	1 000	mW	
Junction Temperature	Tj	1 50	°C	
Storage Temperature Range	$T_{ m stg}$	-55~1 50	°C	

PC*: Mounted on ceramic substrate (250mm²×0.8t)



Weight: 0.05g Marking



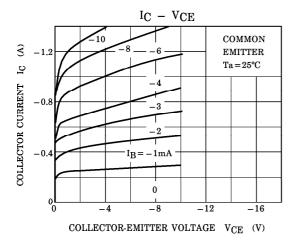
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

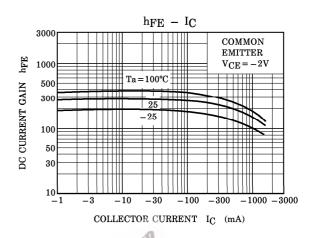
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = -30V, I_{E} = 0$	_	_	-0.1	μA
Emitter Cut-off Current	I _{EBO}	$V_{EB} = -5V, I_{C} = 0$	_	_	-0.1	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{C} = -10 \text{mA}, I_{B} = 0$	_30	_	_	V
Emitter-Base Breakdown Voltage	V (BR) EBO	$I_E = -1 \text{mA}, I_C = 0$	-5	_	_	V
DC Current Gain	h _{FE} (Note)	$V_{CE} = -2V, I_{C} = -500 \text{mA}$	100		320	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_C = -1.5A, I_B = -0.03A$	_	_	-2.0	V
Base-Emitter Voltage	$v_{ m BE}$	$V_{CE} = -2V, I_{C} = -500 \text{mA}$	—	_	-1.0	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -2V, I_{C} = -500 \text{mA}$	_	120	_	MHz
Collector Output Capacitance	C _{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	_	_	50	рF

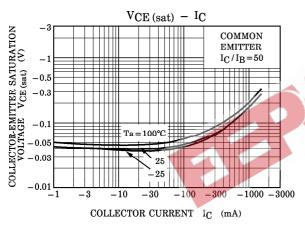
Note: hFE Classification O: 100~200, Y: 160~320

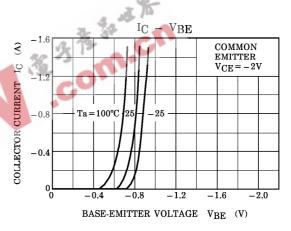
TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing TOSHIBA products, to observe standards of safety, and to avoid situations in which a malfunction or failure of a TOSHIBA product could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that TOSHIBA products are used within specified operating ranges as set forth in the most recent products specifications. Also, please keep in mind the precautions and conditions set forth in the TOSHIBA Semiconductor Reliability Handbook.

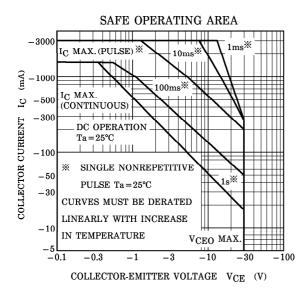
TOSHIBA 2SA1203

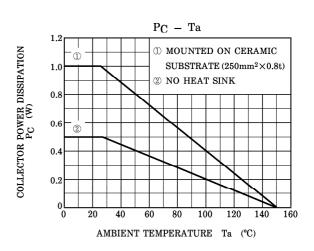












961001EAA2

The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.
 The information contained herein is subject to change without notice.