TOSHIBA TRANSISTOR SILICON NPN EPITAXIAL TYPE (PCT PROCESS)

2 S C 2 8 8 3

AUDIO FREQUENCY AMPLIFIER APPLICATIONS.

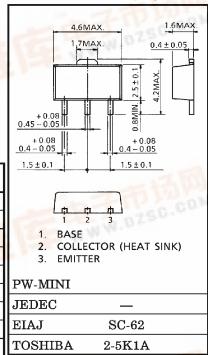
- Suitable for Output Stage of 3 Watts Amplifier
- PC=1~2W (Mounted Ceramic Substrate)
- Small Flat Package
- Complementary to 2SA1203

MAXIMUM RATINGS (Ta = 25°C)

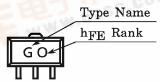
CHARACTERISTIC	SYMBOL	RATING	UNIT	
Collector-Base Voltage	v_{CBO}	30	V	
Collector-Emitter Voltage	v_{CEO}	30	V	
Emitter-Base Voltage	$v_{ m EBO}$	5	V	
Collector Current	$I_{\mathbf{C}}$	1.5	A	
Base Current	$I_{\mathbf{B}}$	0.3	Α	
Collector Power Dissipation	P _C	500	mW	
Collector Power Dissipation	P _C (Note)	1000	mW	
Junction Temperature	$\mathrm{T_{j}}$	150	°C	
Storage Temperature Range	$\mathrm{T_{stg}}$	-55~150	°C	

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

Unit in mm



Weight: 0.05g Marking



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

df.dzsc.com

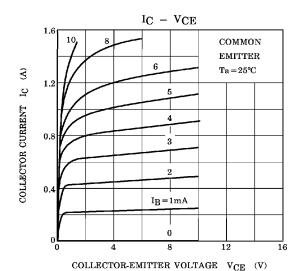
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = 30V, I_{E} = 0$	_	_	0.1	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = 5V, I_{C} = 0$	_		0.1	μ A
Col <mark>lector-Emitt</mark> er Breakdown Voltage	V (BR) CEO	I _C =10mA, I _B =0	30	-2:	101 7	V
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	$I_E=1$ mA, $I_C=0$	5		0.75°C	V
DC Current Gain	h _{FE} (Note)	$V_{\rm CE} = 2V$, $I_{\rm C} = 500 \rm mA$	100	Al An .	320	
Collector-Emitter Saturation Voltage	V _{CE} (sat)	$I_{C}=1.5A$, $I_{B}=0.03A$	_	- P 1	2.0	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = 2V, I_{C} = 500 \text{mA}$	_	_	1.0	V
Transition Frequency	f_{T}	$V_{\rm CE}$ =2V, $I_{\rm C}$ =500mA	_	120	_	MHz
Collector Output Capacitance	$C_{ m ob}$	$V_{CB} = 10V, I_{E} = 0, f = 1MHz$	_		40	pF

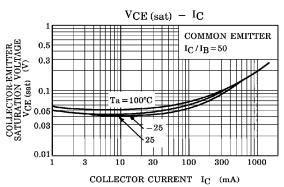
Note: hFE Classification O: 100~200, Y: 160~320

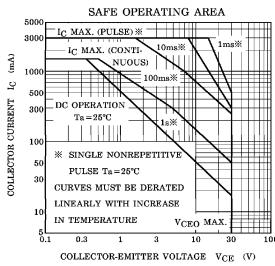
961001EAA2

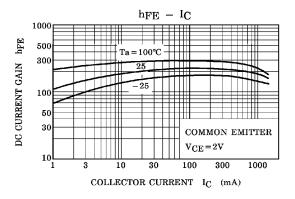
[■] TOSHIBA is continually working to improve the quality and the reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing 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.

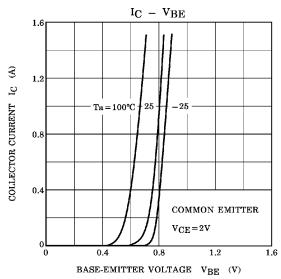
TOSHIBA 2SC2883

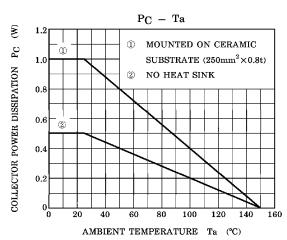












The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication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