TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT process)

2SC2884

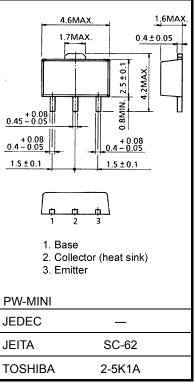
Audio Frequency Amplifier Applications

Unit: mm

- High DC current gain: hFE = 100 to 320
- Suitable for output stage of 1 watts amplifier
- · Small flat package
- P_C = 1.0 to 2.0 W (mounted on a ceramic substrate)
- Complementary to 2SA1204

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit	
Collector-base voltage	V_{CBO}	35	V	
Collector-emitter voltage	V _{CEO}	30	٧	
Emitter-base voltage	V _{EBO}	5	V	
Collector current	IC	800	mA	
Base current	ΙΒ	160	mA	
Collector power dissipation	PC	500		
	P _C (Note 1)	1000	mW	
Junction temperature	Tj	150	°C	
Storage temperature range	T _{stg}	-55 to 150	°C	



Weight: 0.05 g (typ.)

- Note 1: Mounted on a ceramic substrate (250 mm² × 0.8 t)
- Note 2: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

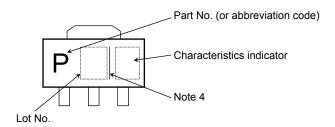


Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 35 V, I _E = 0	_	_	0.1	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	0.1	μΑ
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	30	_	_	٧
DC current gain	h _{FE (1)} (Note 3)	I _E = 1 V, I _C = 100 mA	100	_	320	_
	h _{FE} (2)	V _{CE} = 1 V, I _C = 700 mA	35	_	_	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 500 mA, I _B = 20 mA	_	_	0.5	V
Base-emitter voltage	V _{BE}	V _{CE} = 1 V, I _C = 10 mA	0.5	_	0.8	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 10 mA	_	120	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	13	_	pF

Note 3: h_{FE (1)} classification O: 100 to 200, Y: 160 to 320

Marking



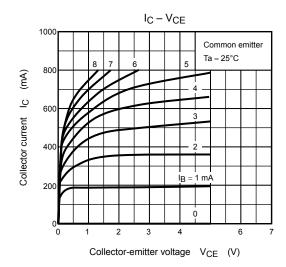
Note 4: A line to the right of a Lot No. identifies the indication of product Labels.

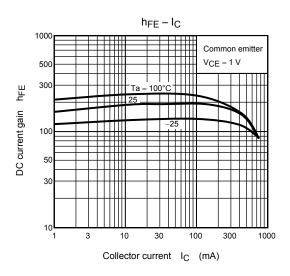
Without a line: [[Pb]]/INCLUDES > MCV

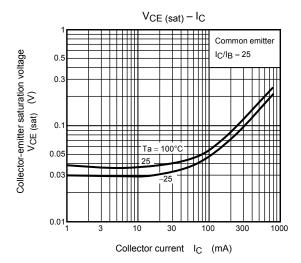
With a line: [[G]]/RoHS COMPATIBLE or [[G]]/RoHS [[Pb]]

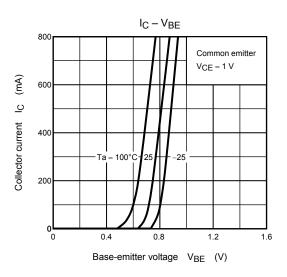
Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. The RoHS is the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

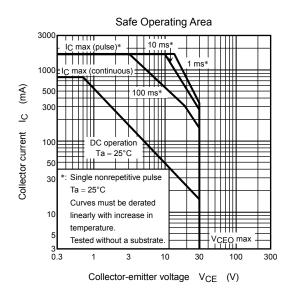
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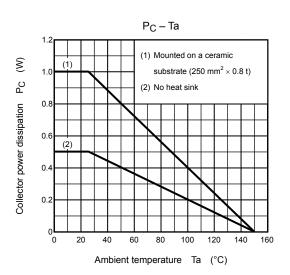












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