TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

2SA1360

Audio Frequency Amplifier Applications

- Complementary to 2SC3423
- Small collector output capacitance: $C_{ob} = 2.5 \text{ pF (typ.)}$
- High transition frequency: $f_T = 200 \text{ MHz}$ (typ.)

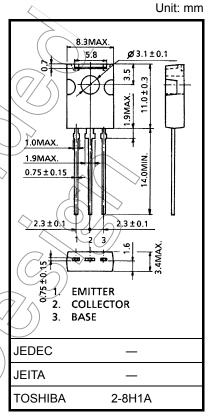
Absolute Maximum Ratings (Ta = 25°C)

Characteristics		Symbol	Rating	Unit
Collector-base voltage		V _{CBO}	-150	$(\checkmark \checkmark)$
Collector-emitter voltage		V _{CEO}	-150	V
Emitter-base voltage		V _{EBO}	-5	V
Collector current		IC	-50	<> mA
Base current		ΙB	(-5)	mA
Collector power dissipation	Ta = 25°C	D- ^	1.2	W
	Tc = 25°C	Pc 5		
Junction temperature		T _j	150	°Ç
Storage temperature range		T _{stg}	55 to 150	°C

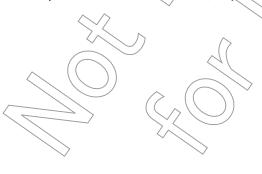
Note1: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the

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.).



Weight: 0.82 g (typ.)

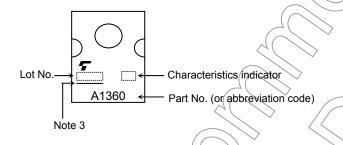


Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = -150 \text{ V}, I_E = 0$	_	_	-0.1	μΑ
Emitter cut-off current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$	_	_	-0.1	μA
Collector-emitter breakdown voltage	V (BR) CEO	$I_C = -1 \text{ mA}, I_B = 0$	-150	_	_	V
DC current gain	h _{FE} (Note 2)	V _{CE} = -5 V, I _C = -10 mA	80) } -	240	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = -10 mA, I _B = -1 mA	>~	_	-1.0	V
Base-emitter voltage	V _{BE}	V _{CE} = -5 V, I _C = -10 mA	$\bigcirc)$	_	-0.8	V
Transition frequency	f _T	V _{CE} = -5 V, I _C = -10 mA	_	200	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	<u> </u>	2.5	_	pF

Note 2: hFE classification O: 80 to 160, Y: 120 to 240

Marking

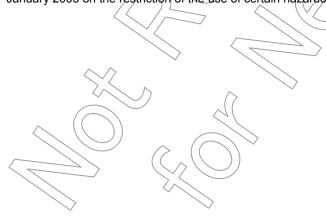


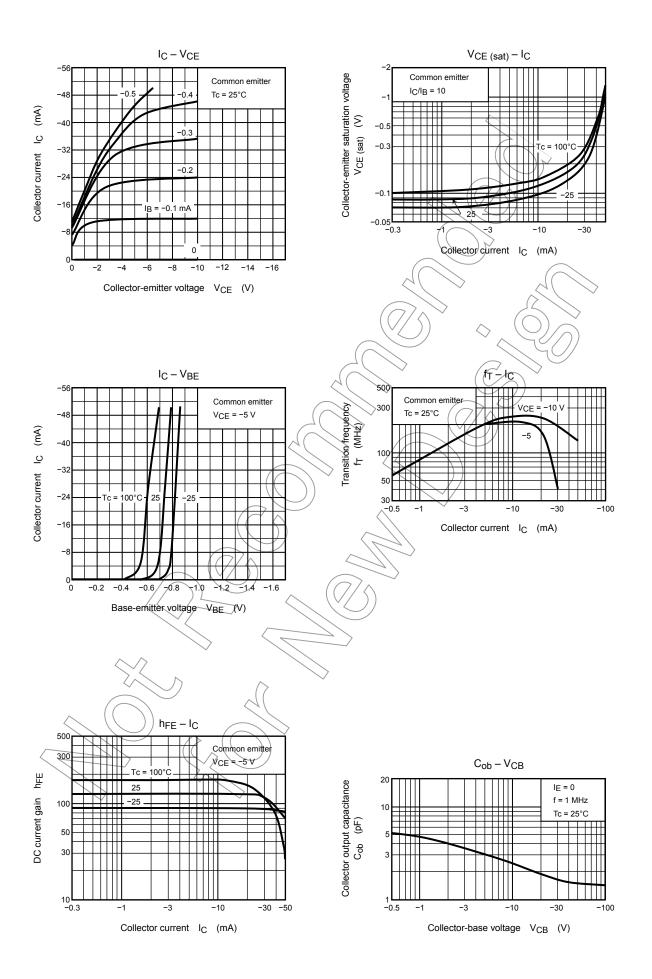
Note 3: A line under a Lot No. identifies the indication of product Labels.

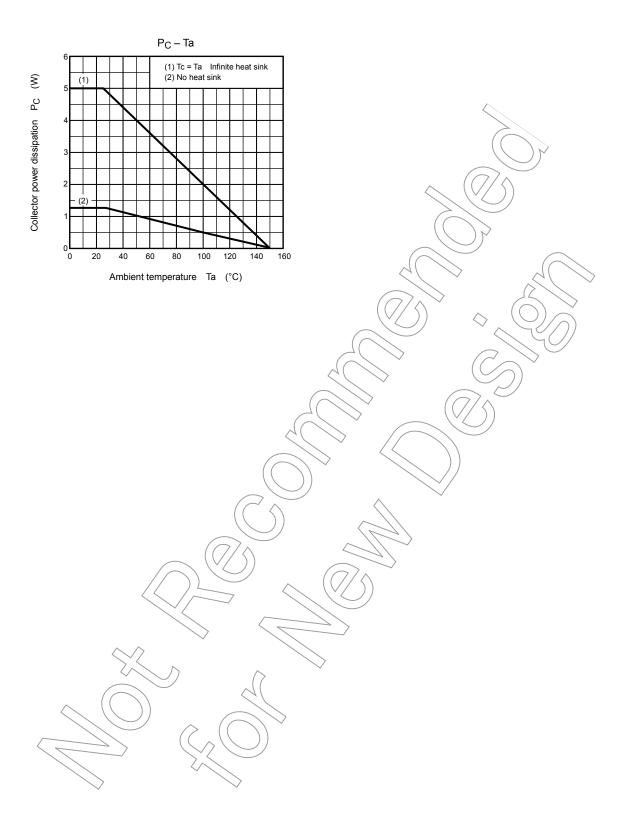
Not underlined: [[Pb]]/INCLUDES > MCV

Underlined: [[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.







4 2010-03-10

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