TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

2SC3421

Audio Frequency Power Amplifier Applications

- Complementary to 2SA1358
- Suitable for driver of 60 to 80 watts audio amplifier
- High breakdown voltage

Absolute Maximum Ratings (Ta = 25°C)

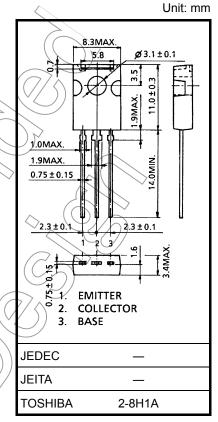
Characteristics		Symbol	Rating	Unit
Collector-base voltage		V_{CBO}	120	(γ)
Collector-emitter voltage		V _{CEO}	120	$\langle v \rangle$
Emitter-base voltage		V _{EBO}	5) V
Collector current		Ic	1	A
Base current		ΙΒ	100	mA mA
Collector power dissipation	Ta = 25°C	PC	1.5	W
	Tc = 25°C	PC ^	10,	VV
Junction temperature		T _j	150	⟨⟨c
Storage temperature range		T _{stg}	-55 to 150)3°

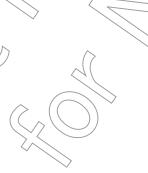
Note1: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e.

Weight: 0.82 g (typ.)

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).



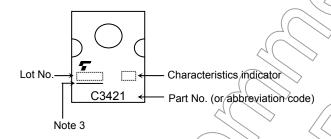


Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 120 V, I _E = 0	_	_	100	nA
Emitter cut-off current	I _{EBO}	V _{EB} = 5 V, I _C = 0	_	_	100	nA
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	120	_	_	V
DC current gain	h _{FE} (Note 2)	V _{CE} = 5 V, I _C = 100 mA	80) -	240	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 500 mA, I _B = 50 mA		0.30	1.0	V
Base-emitter voltage	V _{BE}	V _{CE} = 5 V, I _C = 500 mA	())	0.78	1.0	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 100 mA		120	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	· –	15	_	pF

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

Marking

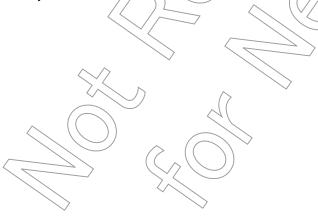


Note 3: A line under a Lot No. identifies the indication of product Labels.

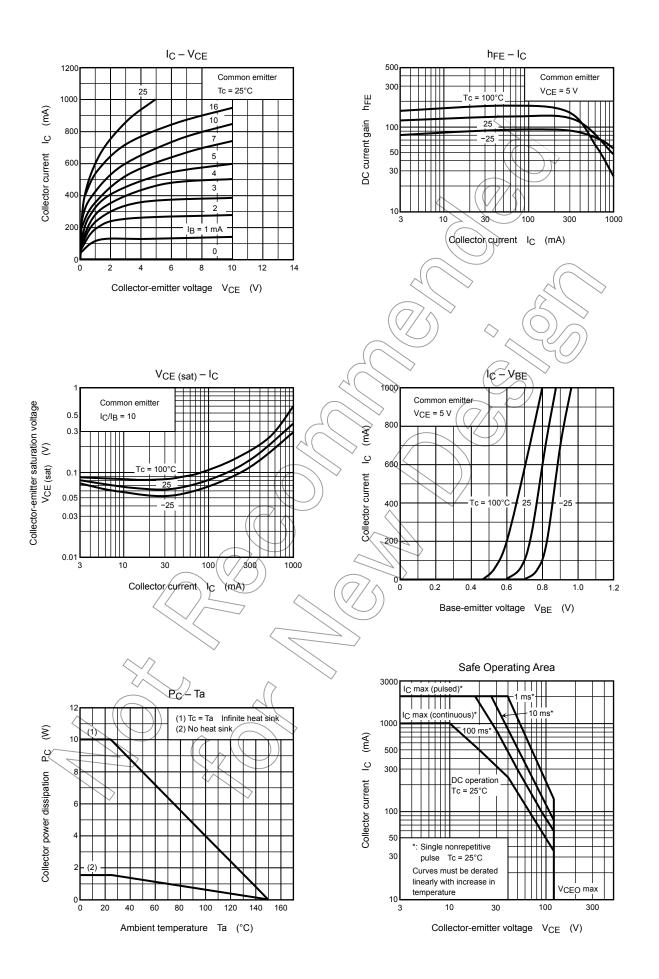
Not underlined: [[Pb]]/INCLUDES > MCV

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.



2 2009-12-21



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