Unit: mm

TOSHIBA Transistor Silicon NPN Epitaxial Type (PCT Process)

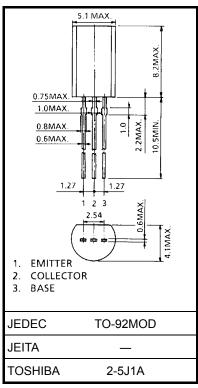
2SC2383

Color TV Vertical Deflection Output Applications Color TV Class-B Sound Output Applications

- High breakdown voltage: VCEO = 160 V
- Large continuous collector current capability
- Recommended for vertical deflection output & sound output applications for line-operated TVs.
- Complementary to 2SA1013

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Collector-base voltage	V _{CBO}	160	V
Collector-emitter voltage	V _{CEO}	160	V
Emitter-base voltage	V _{EBO}	6	V
Collector current	IC	1	Α
Base current	ΙΒ	0.5	Α
Collector power dissipation	PC	900	mW
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	-55 to 150	°C



Weight: 0.36 g (typ.)

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).

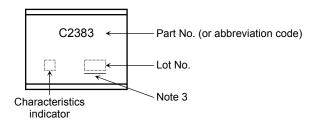


Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = 150 V, I _E = 0	_	_	1.0	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} = 6 V, I _C = 0	_	_	1.0	μΑ
Collector-emitter breakdown voltage	V (BR) CEO	I _C = 10 mA, I _B = 0	160	-	-	V
DC current gain	h _{FE} (Note 2)	V _{CE} = 5 V, I _C = 200 mA	60	-	320	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = 500 mA, I _B = 50 mA	_	_	1.5	V
Base-emitter voltage	V _{BE}	V _{CE} = 5 V, I _C = 5 mA	0.45	_	0.75	V
Transition frequency	f _T	V _{CE} = 5 V, I _C = 200 mA	20	100	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1 MHz	_	_	20	pF

Note 2: hFE classification R: 60 to 120, O: 100 to 200, Y: 160 to 320

Marking

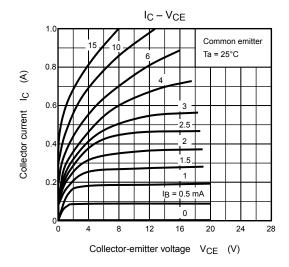


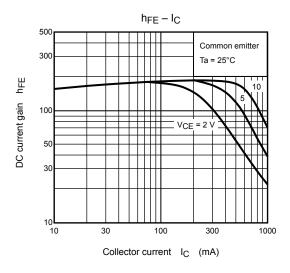
Note 3: A line under a Lot No. identifies the indication of product Labels.

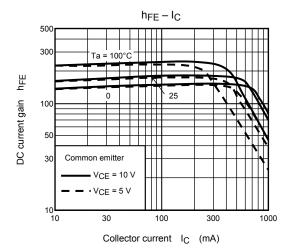
Not underlined: [[Pb]]/INCLUDES > MCV

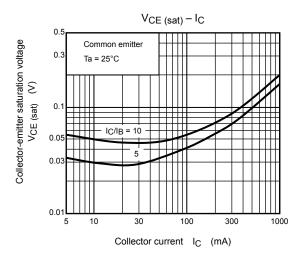
Underlined: [[G]]/RoHS COMPATIBLE or [[G]]/RoHS [[Pb]]

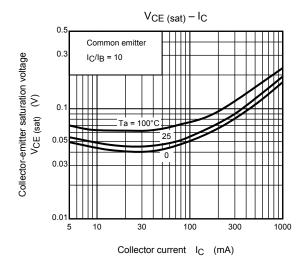
Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. The RoHS is the Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical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

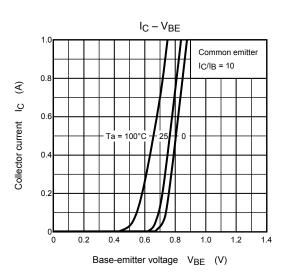




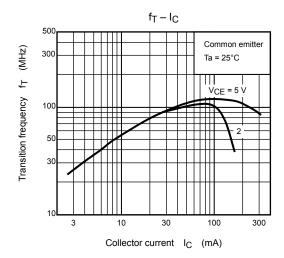


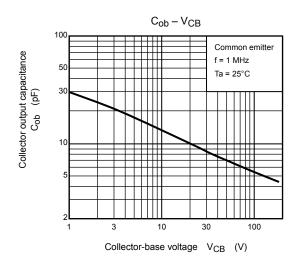


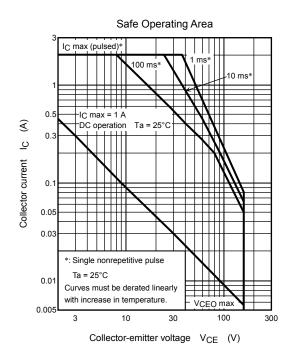




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