Unit: mm

TOSHIBA Transistor Silicon PNP Epitaxial Type

2SA1932

Power Amplifier Applications
Driver Stage Amplifier Applications

- High transition frequency: $f_T = 70 \text{ MHz}$ (typ.)
- Complementary to 2SC5174

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit	
Collector-base voltage	V_{CBO}	-230	V	
Collector-emitter voltage	V _{CEO}	-230	V	
Emitter-base voltage	V _{EBO}	-5	V	
Collector current	IC	-1	Α	
Base current	ΙΒ	-0.1	Α	
Collector power dissipation	PC	1.8	W	
Junction temperature	Tj	150	°C	
Storage temperature range	T _{stg}	-55 to 150	°C	

Note: 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

0.5 ± 0.5 ±

Weight: 1.5 g (typ.)

reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

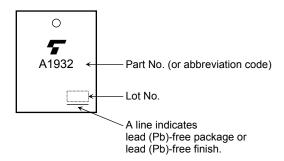
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/Derating Concept and Methods) and individual reliability data (i.e. reliability test report and estimated failure rate, etc).



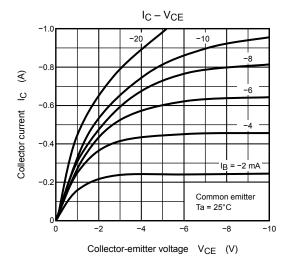
Electrical Characteristics (Ta = 25°C)

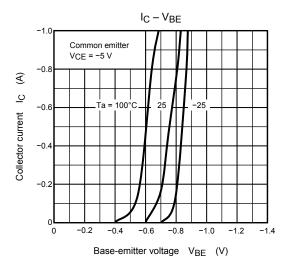
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = -230 V, I _E = 0	_	_	-1.0	μΑ
Emitter cut-off current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_C = 0$	_	_	-1.0	μA
Collector-emitter breakdown voltage	V (BR) CEO	I _C = -10 mA, I _B = 0	-230	_	_	V
DC current gain	h _{FE}	V _{CE} = -5 V, I _C = -100 mA	100	_	320	
Collector-emitter saturation voltage	V _{CE} (sat)	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$	_	_	-1.5	V
Base-emitter voltage	V _{BE}	$V_{CE} = -5 \text{ V}, I_{C} = -500 \text{ mA}$	_	_	-1.0	V
Transition frequency	f _T	V _{CE} = -10 V, I _C = -100 mA	_	70	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	_	30	_	pF

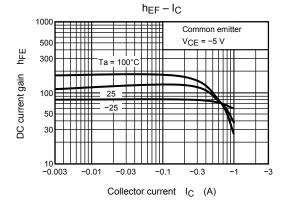
Marking

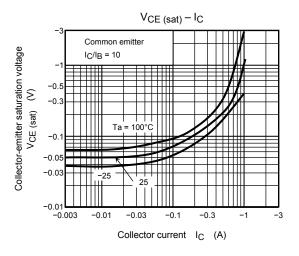


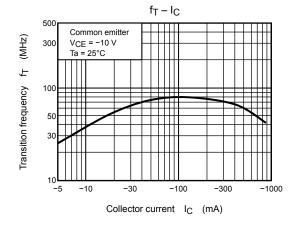
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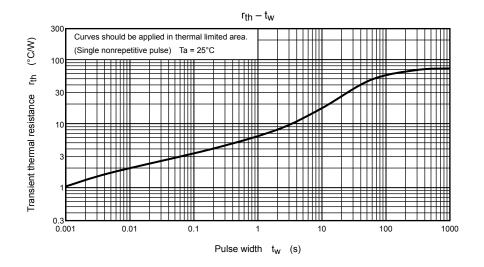


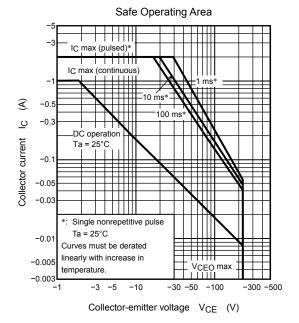


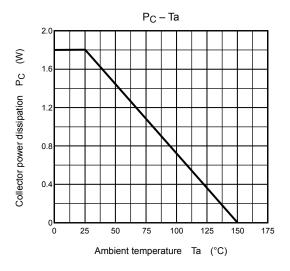




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