Unit: mm

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

2SA817A

Driver-Stage Amplifier Applications
Voltage Amplifier Applications

- Complementary to 2SC1627A.
- Driver stage application of 30 to 35 watts amplifiers.

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit	
Collector-base voltage	V_{CBO}	-80	V	
Collector-emitter voltage	V _{CEO}	-80	V	
Emitter-base voltage	V _{EBO}	-5	V	
Collector current	IC	-400	mA	
Emitter current	ΙE	400	mA	
Collector power dissipation	PC	800	mW	
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 reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

1. EMITTER
2. COLLECTOR
3. BASE

JEDEC TO-92MOD

JEITA —

TOSHIBA 2-5J1A

Weight: 0.36 g (typ.)

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).

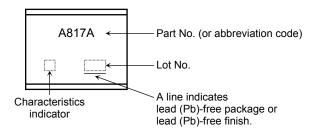


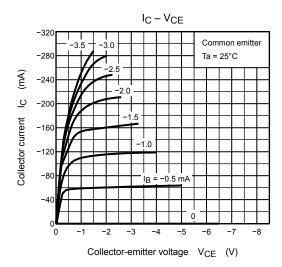
Electrical Characteristics (Ta = 25°C)

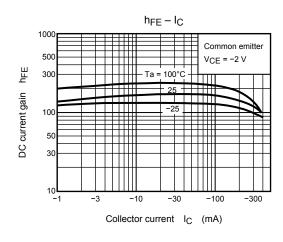
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Collector cut-off current	I _{CBO}	$V_{CB} = -50 \text{ V}, I_{E} = 0$	_	_	-100	nA
Emitter cut-off current	I _{EBO}	$V_{EB} = -5 \text{ V}, I_{C} = 0$	_	_	-100	nA
Collector-emitter breakdown voltage	V (BR) CEO	$I_C = -5 \text{ mA}, I_B = 0$	-80	_	_	V
DC current gain	h _{FE (1)} (Note)	V _{CE} = -2 V, I _C = -50 mA	70	_	240	
	h _{FE (2)}	V _{CE} = -2 V, I _C = -200 mA	40	_	_	
Collector-emitter saturation voltage	V _{CE} (sat)	$I_C = -200 \text{ mA}, I_B = -20 \text{ mA}$	_	_	-0.4	V
Base-emitter voltage	V _{BE}	$V_{CE} = -2 \text{ V}, I_{C} = -5 \text{ mA}$	-0.55	_	-0.8	V
Transition frequency	f _T	V _{CE} = -10 V, I _C = -10 mA	_	100	_	MHz
Collector output capacitance	C _{ob}	V _{CB} = −10 V, I _E = 0, f = 1 MHz	_	14	_	pF

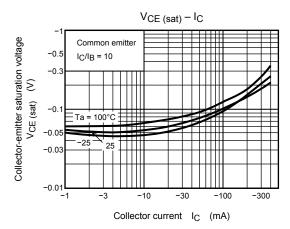
Note: $h_{FE(1)}$ classification O: 70 to 140, Y: 120 to 240

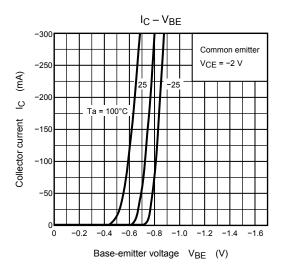
Marking

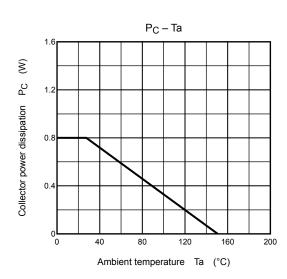


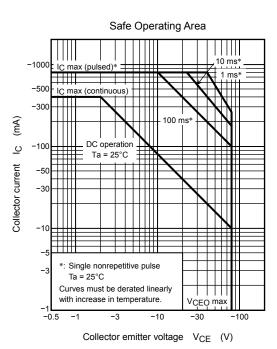












RESTRICTIONS ON PRODUCT USE

20070701-EN

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