

TOSHIBA Transistor Silicon PNP Epitaxial Type (PCT Process)

2SA1926

Power Amplifier Applications

Power Switching Applications

Unit: mm

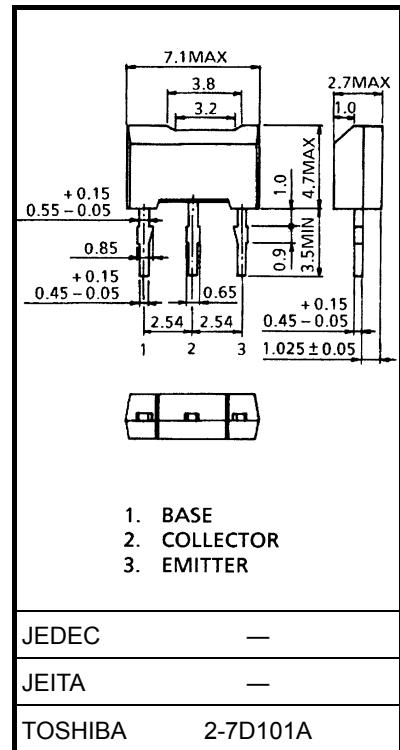
- Low collector saturation voltage: $V_{CE}(\text{sat}) = -0.17 \text{ V (max)}$
($I_C = -1 \text{ A}$)

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}	-8	V
Collector current	I_C	-3	A
Base current	I_B	-1	A
Collector power dissipation	P_C	1000	mW
Junction temperature	T_j	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.

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).



JEDEC —

JEITA —

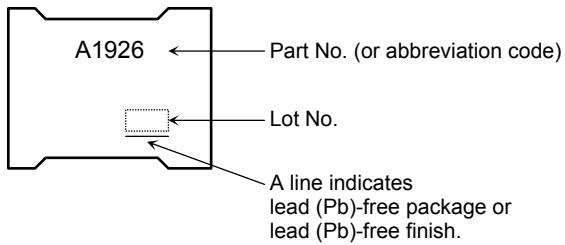
TOSHIBA 2-7D101A

Weight: 0.2 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	I _{CBO}	V _{CB} = -80 V, I _E = 0	—	—	-1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -8 V, I _C = 0	—	—	-1	μA
Collector-emitter breakdown voltage	V _{CEO}	I _C = -10 mA, I _B = 0	-80	—	—	V
DC current gain	h _{FE} (1)	V _{CE} = -2 V, I _C = -500 mA	150	—	400	
	h _{FE} (2)	V _{CE} = -2 V, I _C = -1.5 A	40	—	—	
Collector-emitter saturation voltage	V _{CE} (sat)	I _C = -1 A, I _B = -50 mA	—	—	-0.17	V
Base-emitter saturation voltage	V _{BE} (sat)	I _C = -1 A, I _B = -50 mA	—	—	-1.2	V
Transition frequency	f _T	V _{CE} = -2 V, I _C = -0.5 A	—	80	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = -10 V, I _E = 0, f = 1 MHz	—	45	—	pF

Marking



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20070701-EN

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