

TOSHIBA Transistor Silicon NPN Epitaxial Planar Type

# 2SC6067

- Medium Power Amplifier Applications
- Strobe Flash Applications

- Low Saturation Voltage:  $V_{CE(sat)} = 0.3 \text{ V (max)}$   
(@  $I_C=3\text{A} / I_B=60\text{mA}$ )

## Absolute Maximum Ratings (Ta = 25°C)

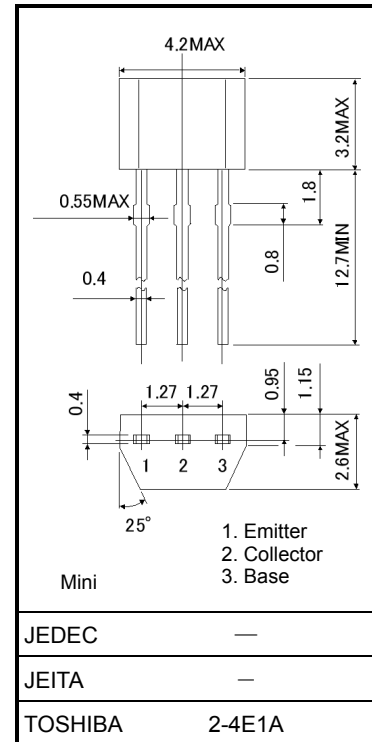
Characteristics	Symbol	Rating	Unit
Collector-Base voltage	$V_{CB0}$	15	V
Collector-Emitter voltage	$V_{CEO}$	10	V
Emitter-Base voltage	$V_{EBO}$	6	V
Collector current	DC	$I_C$	5
	Pulsed	$I_{CP}$	9
Collector power dissipation	$P_C$ (Note1)	550	mW
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{stg}$	-55 to 150	°C

Note 1: When a device is mounted on a glass epoxy board  
(35 mm × 30 mm × 1mm)

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).

Unit: mm



Weight: 0.13 g (typ.)

## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Collector cut-off current	$I_{CB0}$	$V_{CB} = 15 \text{ V}, I_E = 0$	—	—	0.1	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = 10 \text{ V}, I_B = 0$	—	—	1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = 6 \text{ V}, I_C = 0$	—	—	0.1	$\mu\text{A}$
Collector-Emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1 \text{ mA}, I_B = 0$	10	—	—	V
DC current gain	$h_{FE} (1)$	$V_{CE} = 1.5 \text{ V}, I_C = 0.5 \text{ A}$ (Note 2)	450	—	700	
	$h_{FE} (2)$	$V_{CE} = 1.5 \text{ V}, I_C = 2 \text{ A}$ (Note 2)	310	—	—	
	$h_{FE} (3)$	$V_{CE} = 1.5 \text{ V}, I_C = 5 \text{ A}$ (Note 2)	160	—	—	
Collector-Emitter saturation voltage	$V_{CE(sat)}$	$I_C = 3 \text{ A}, I_B = 60 \text{ mA}$ (Note 2)	—	—	0.3	V
Collector-Output Capacitance	$C_{ob}$	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$	—	28	—	pF

Note 2: Pulse test

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