# 2SA1194(K)

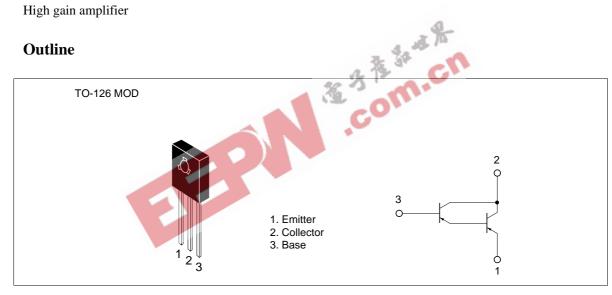
# Silicon PNP Epitaxial

# **HITACHI**

### **Application**

High gain amplifier

#### **Outline**



## **Absolute Maximum Ratings** ( $Ta = 25^{\circ}C$ )

Item	Symbol	Rating	Unit
Collector to base voltage	V <sub>CBO</sub>	-60	V
Collector to emitter voltage	V <sub>CEO</sub>	-60	V
Emitter to base voltage	$V_{EBO}$	<b>-7</b>	V
Collector current	I <sub>c</sub>	<b>–1</b>	A
Collector peak current	I <sub>C(peak)</sub>	-2	A
Collector power dissipation	P <sub>c</sub>	1	W
	P <sub>c</sub> *1	8	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

Note: 1. Value at  $T_c = 25^{\circ}C$ 

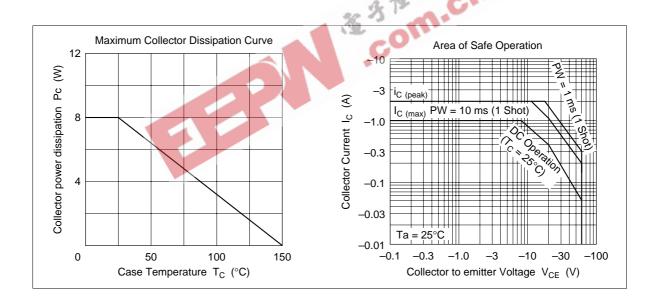


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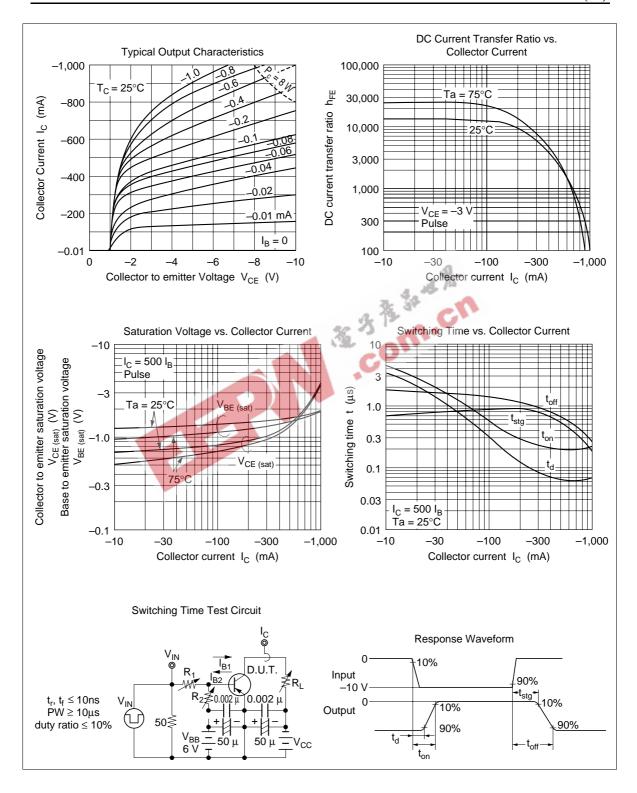
## **Electrical Characteristics** (Ta = 25°C)

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-60	_	_	V	$I_{\text{C}} = -1 \text{ mA}, R_{\text{BE}} = \infty$
Collector cutoff current	I <sub>CBO</sub>	_	_	-1.0	μΑ	$V_{CB} = -60 \text{ V}, I_{E} = 0$
Emitter cutoff current	I <sub>EBO</sub>	_	_	-1.0	μΑ	$V_{EB} = -7 \text{ V}, I_{C} = 0$
DC current transfer ratio	h <sub>FE</sub>	1000	_	_		$V_{CE} = -3 \text{ V}, I_{C} = -500 \text{ mA}^{*1}$
Collector to emitter saturation voltage	$V_{\text{CE(sat)}}$	_	_	-2.0	V	$I_{\rm C} = -500 \text{ mA}, I_{\rm B} = -1 \text{ mA}^{*1}$
Base to emitter saturation voltage	$V_{\text{BE}(\text{sat})}$	_	_	-2.0	V	<del></del> ;
Turn on time	$\mathbf{t}_{on}$	_	0.7	_	μs	$I_{\rm C}$ = -500 mA
Turn off time	t <sub>off</sub>	_	8.0	_	μs	$I_{B1} = -I_{B2} = -1 \text{ mA}$

Note: 1. Pulse test



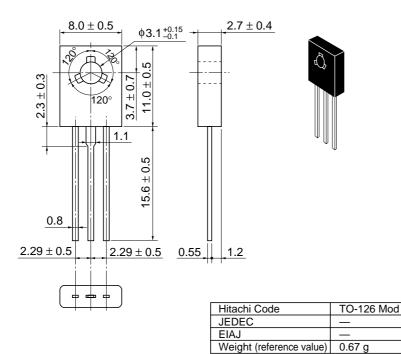
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Unit: mm



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