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# 2SA844

Silicon PNP Epitaxial

# HITACHI

ADE-208-320 (Z)  
1st. Edition  
Mar. 2001

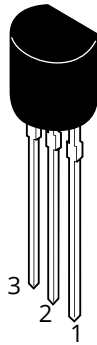
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## Application

Low frequency amplifier

## Outline

TO-92 (1)



1. Emitter  
2. Collector  
3. Base

**Absolute Maximum Ratings** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Ratings	Unit
Collector to base voltage	VCBO	-55	V
Collector to emitter voltage	VCEO	-55	V
Emitter to base voltage	VEBO	-5	V
Collector current	IC	-100	mA
Emitter current	IE	100	mA
Collector power dissipation	PC	300	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

**Electrical Characteristics** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Collector to base	Min	Typ	Max	Unit	Test conditions
breakdown voltage	V(BR)CBO		-55			V	IC = -10 $\mu\text{A}$ , IE = 0
Collector to emitter			-55			V	IC = -1 mA, RBE = $\infty$
breakdown voltage	V(BR)CEO		5			V	IE = -10 $\mu\text{A}$ , IC = 0
Emitter to base breakdown voltage	V(BR)EBO				-100	nA	VCB = -18 V, IE = 0
					-50	nA	VFB = -2 V, IC = 0
Collector cutoff current	ICBO		160		800		VCE = -12 V, IC = -2 mA
Emitter cutoff current	IEBO		-0.1		-0.5		IC = -10 mA, IB = -1 mA
DC current transfer ratio	hFE*					V	
Collector to emitter saturation voltage	VCE(sat)		-0.66		-0.75	V	VCE = -12 V, IC = -2 mA
			-200			MHz	VCE = -12 V, IE = -2 mA
Base to emitter voltage	VBE		-2.0			pF	VCB = -10 V, IE = 0, f = 1 MHz
Gain bandwidth product	fT		as follows.				

Collector output capacitance Cob

FE

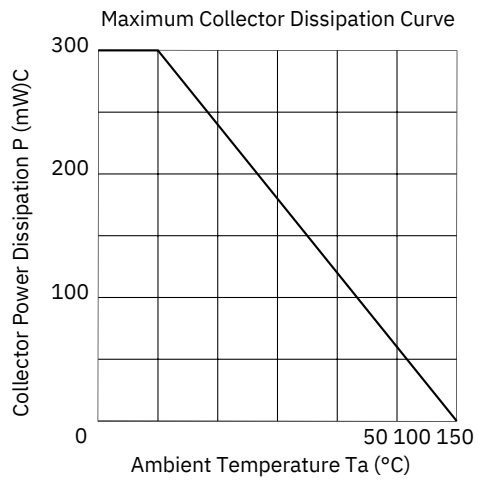
Note:1.The 2SA844 is grouped by h

**C D E**

160 to 320 250 to 500 400 to 800

See characteristic curves of 2SA836.

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