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# 2SC4264

Silicon NPN Epitaxial

# HITACHI

ADE-208-1101A (Z)  
2nd. Edition  
Mar. 2001

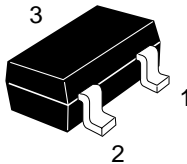
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## Application

VHF / UHF RF amplifier, Local oscillator, Mixer

## Outline

CMPAK



1. Emitter
2. Base
3. Collector

Note: Marking is "GC".

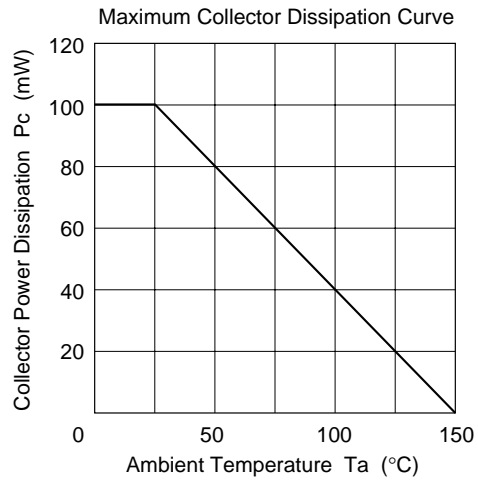
**Absolute Maximum Ratings** ( $T_a = 25^\circ\text{C}$ )

Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{\text{CBO}}$	20	V
Collector to emitter voltage	$V_{\text{CEO}}$	11	V
Emitter to base voltage	$V_{\text{EBO}}$	3	V
Collector current	$I_{\text{C}}$	50	mA
Collector power dissipation	$P_{\text{C}}$	100	mW
Junction temperature	$T_{\text{j}}$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$

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

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	20	—	—	V	$I_{\text{C}} = 10 \mu\text{A}$ , $I_{\text{E}} = 0$
Collector cutoff current	$I_{\text{CBO}}$	—	—	0.5	$\mu\text{A}$	$V_{\text{CB}} = 15 \text{ V}$ , $I_{\text{E}} = 0$
	$I_{\text{CEO}}$	—	—	10	$\mu\text{A}$	$V_{\text{CE}} = 11 \text{ V}$ , $R_{\text{BE}} = \infty$
Emitter cutoff current	$I_{\text{EBO}}$	—	—	1.0	$\mu\text{A}$	$V_{\text{EB}} = 3 \text{ V}$ , $I_{\text{C}} = 0$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	0.7	V	$I_{\text{C}} = 10 \text{ mA}$ , $I_{\text{B}} = 5 \text{ mA}$
DC current transfer ratio	$h_{\text{FE}}$	20	—	—		$V_{\text{CE}} = 10 \text{ V}$ , $I_{\text{C}} = 5 \text{ mA}$
Collector output capacitance	$C_{\text{ob}}$	—	—	1.5	pF	$V_{\text{CB}} = 10 \text{ V}$ , $I_{\text{E}} = 0$ , $f = 1 \text{ MHz}$
Gain bandwidth product	$f_{\text{T}}$	1.4	—	—	GHz	$V_{\text{CE}} = 10 \text{ V}$ , $I_{\text{C}} = 10 \text{ mA}$

See characteristic curves of 2SC2734.





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