
2SC4260

Silicon NPN Epitaxial

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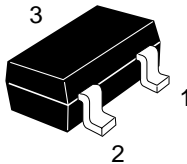
ADE-208-1098A (Z)
2nd. Edition
Mar. 2001

Application

UHF frequency converter, Wide band amplifier

Outline

CMPAK



1. Emitter
2. Base
3. Collector

Note: Marking is "TI-".

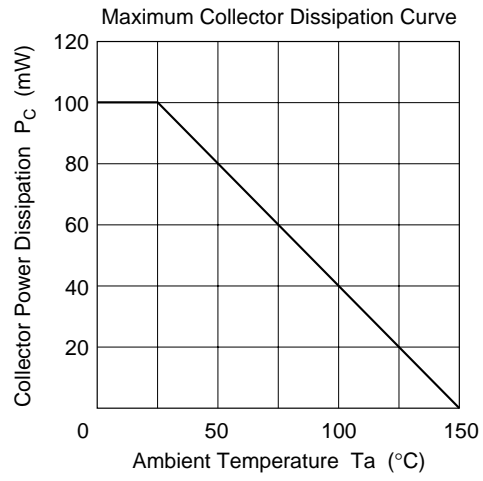
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Item	Symbol	Rated	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	13	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_{C}	50	mA
Collector power dissipation	P_{C}	100	mW
Junction temperature	T_{j}	150	$^\circ\text{C}$
Storage temperature	T_{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	$V_{(\text{BR})\text{CBO}}$	25	—	—	V	$I_{\text{C}} = 10 \mu\text{A}$, $I_{\text{E}} = 0$
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{\text{CB}} = 15 \text{ V}$, $I_{\text{E}} = 0$
	I_{CEO}	—	—	10	μA	$V_{\text{CE}} = 13 \text{ V}$, $R_{\text{BE}} = \infty$
Emitter cutoff current	I_{EBO}	—	—	0.3	μA	$V_{\text{EB}} = 3 \text{ V}$, $I_{\text{C}} = 0$
Collector to emitter saturation voltage	$V_{\text{CE}(\text{sat})}$	—	—	0.3	V	$I_{\text{C}} = 20 \text{ mA}$, $I_{\text{B}} = 4 \text{ mA}$
DC current transfer ratio	h_{FE}	50	—	180		$V_{\text{CE}} = 5 \text{ V}$, $I_{\text{C}} = 5 \text{ mA}$
Collector output capacitance	C_{ob}	—	0.85	1.3	pF	$V_{\text{CB}} = 10 \text{ V}$, $I_{\text{E}} = 0$, $f = 1 \text{ MHz}$
Gain bandwidth product	f_{T}	3.0	3.8	—	GHz	$V_{\text{CE}} = 5 \text{ V}$, $I_{\text{C}} = 5 \text{ mA}$
Conversion gain	CG	—	19	—	dB	$V_{\text{CC}} = 5 \text{ V}$, $I_{\text{C}} = 0.8 \text{ mA}$, $f = 900 \text{ MHz}$
Noise figure	NF	—	8	—	dB	$f_{\text{OSC}} = 930 \text{ MHz}$ (-5dBm), $f_{\text{out}} = 30 \text{ MHz}$

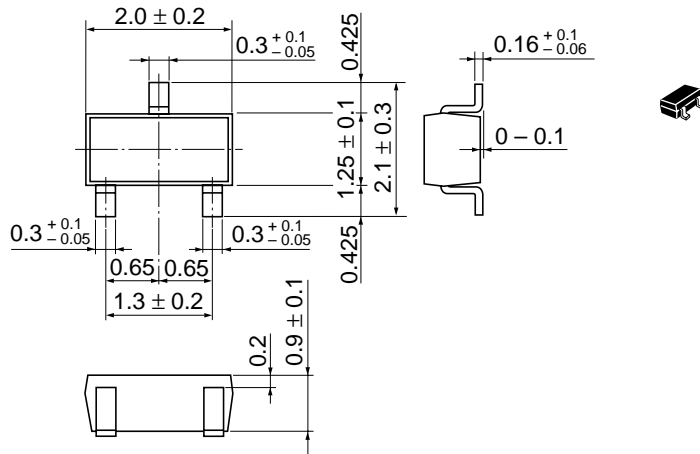
See characteristic curves of 2SC4197.



Package Dimensions

As of January, 2001

Unit: mm



Hitachi Code	CMPAK
JEDEC	—
EIAJ	Conforms
Mass (reference value)	0.006 g

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