
2SC4260

Silicon NPN Epitaxial

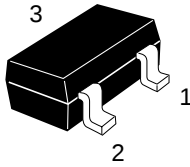
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Application

UHF frequency converter, Wide band amplifier

Outline

CMPAK



- 1. Emitter
- 2. Base
- 3. Collector

Absolute Maximum Ratings (Ta = 25°C)

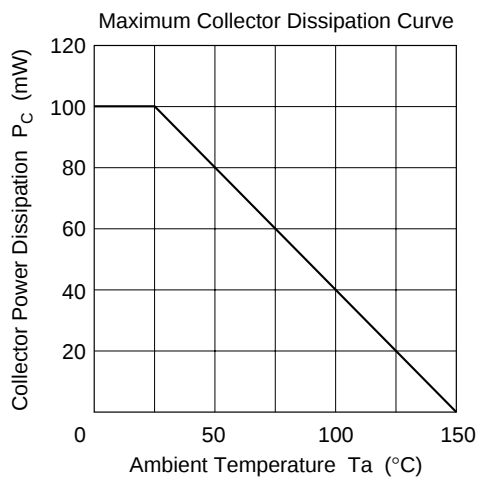
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	25	V
Collector to emitter voltage	V_{CEO}	13	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	50	mA
Collector power dissipation	P_C	100	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	−55 to +150	°C

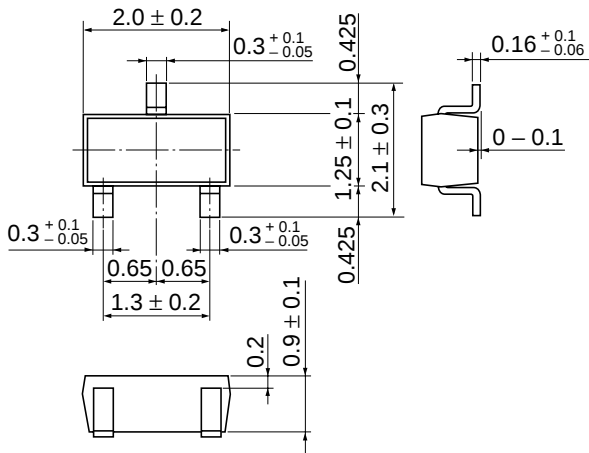
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	25	—	—	V	$I_C = 10\text{ }\mu\text{A}$, $I_E = 0$
Collector cutoff current	I_{CBO}	—	—	0.1	μA	$V_{CB} = 15\text{ V}$, $I_E = 0$
	I_{CEO}	—	—	10	μA	$V_{CE} = 13\text{ V}$, $R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	0.3	μA	$V_{EB} = 3\text{ V}$, $I_C = 0$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.3	V	$I_C = 20\text{ mA}$, $I_B = 4\text{ mA}$
DC current transfer ratio	h_{FE}	50	—	180		$V_{CE} = 5\text{ V}$, $I_C = 5\text{ mA}$
Collector output capacitance	C_{ob}	—	0.85	1.3	pF	$V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$
Gain bandwidth product	f_T	3.0	3.8	—	GHz	$V_{CE} = 5\text{ V}$, $I_C = 5\text{ mA}$
Conversion gain	CG	—	19	—	dB	$V_{CC} = 5\text{ V}$, $I_C = 0.8\text{ mA}$, $f = 900\text{ MHz}$
Noise figure	NF	—	8	—	dB	$f_{OSC} = 930\text{ MHz}$ (−5dBm), $f_{out} = 30\text{ MHz}$

Note: Marking is “TI−”.

See characteristic curves of 2SC4197.





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

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