
2SC4260

Silicon NPN Epitaxial

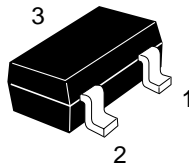
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Application

UHF frequency converter, Wide band amplifier

Outline

CMPAK



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

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

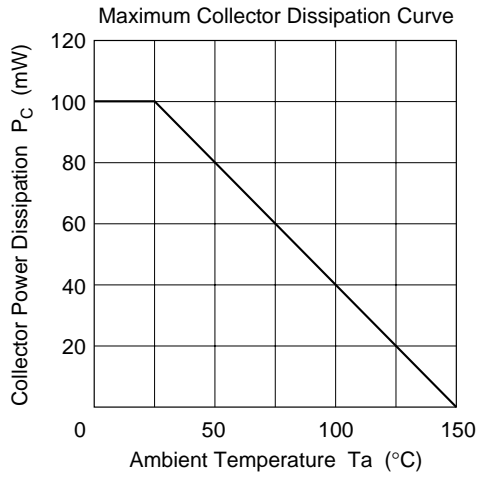
| Item | Symbol | Ratings | Unit |
|------------------------------|------------------|-------------|------------------|
| Collector to base voltage | V_{CBO} | 25 | V |
| Collector to emitter voltage | V_{CEO} | 13 | V |
| Emitter to base voltage | V_{EBO} | 3 | V |
| Collector current | I_{C} | 50 | mA |
| Collector power dissipation | P_{C} | 100 | mW |
| Junction temperature | T_{j} | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

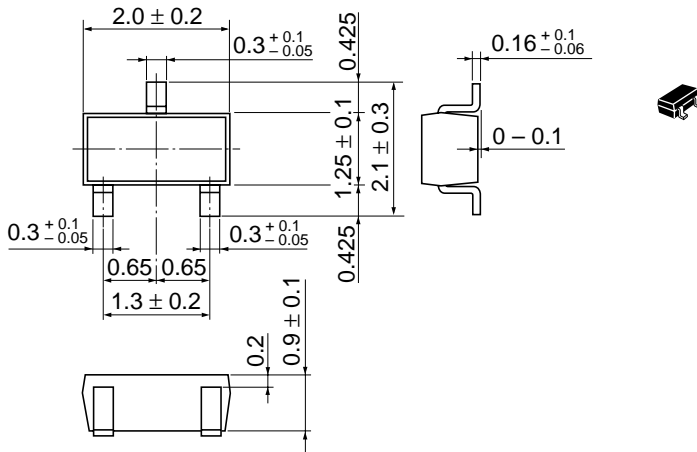
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

| 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), $f_{\text{out}} = 30 \text{ MHz}$ |

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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