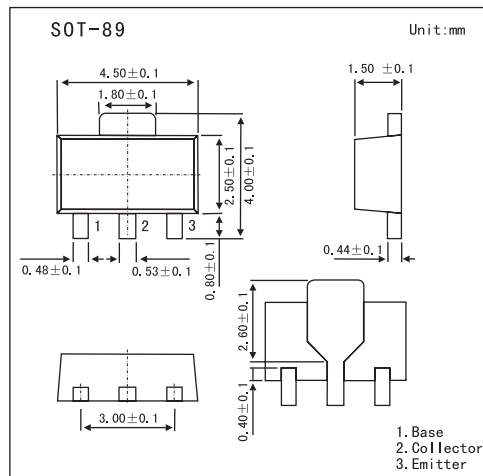


2SC5212

Features

- Low collector saturation voltage $V_{CE(sat)}=0.2V$ typ.
- High f_T $f_T=180MHz$ typ.
- Excellent linearity of dc forward current gain.
- High collector current $I_{CM}=1A$.
- Small package for mounting.



Absolute Maximum Ratings $T_a = 25^\circ C$

| Parameter | Symbol | Rating | Unit |
|---------------------------|-----------|-------------|------------|
| Collector-base voltage | V_{CBO} | 25 | V |
| Emitter-base voltage | V_{EBO} | 4 | V |
| Collector-emitter voltage | V_{CEO} | 20 | V |
| Peak collector current | I_{CM} | 1 | A |
| Collector current | I_C | 700 | mA |
| Collector dissipation | P_C | 500 | mW |
| Junction temperature | T_j | 150 | $^\circ C$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ C$ |

Electrical Characteristics $T_a = 25^\circ C$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|--------------------------------------|---------------|-------------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=10\mu A, I_E=0$ | 25 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=10\mu A, I_C=0$ | 4 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=100\mu A, R_{BE}=\infty$ | 20 | | | V |
| Collector cutoff current | I_{CBO} | $V_{CB}=25V, I_E=0$ | | | 1 | μA |
| Emitter cutoff current | I_{EBO} | $V_{EB}=2V, I_C=0$ | | | 1 | μA |
| DC current gain | h_{FE} | $V_{CE}=4V, I_C=100mA$ | 150 | | 800 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=500mA, I_B=25mA$ | | 0.2 | 0.5 | V |
| Gain bandwidth product | f_T | $V_{CE}=6V, I_E=-10mA$ | | 180 | | MHz |

h_{FE} Classification

| Marking | UE | UF | UG |
|----------|---------|---------|---------|
| h_{FE} | 150~300 | 250~500 | 400~800 |