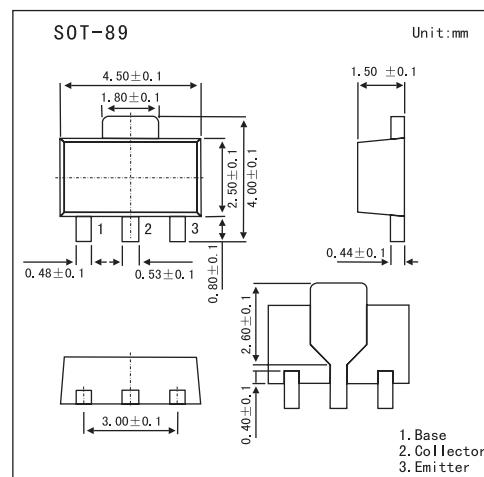


## Small Signal Transistor

## 2SC5211

## ■ Features

- High voltage  $V_{CE0}=50V$ .
- Small package for mounting.

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

| Parameter                 | Symbol    | Rating      | Unit       |
|---------------------------|-----------|-------------|------------|
| Collector-base voltage    | $V_{CB0}$ | 55          | V          |
| Emitter-base voltage      | $V_{EB0}$ | 4           | V          |
| Collector-emitter voltage | $V_{CE0}$ | 50          | V          |
| Peak collector current    | $I_{CM}$  | 600         | mA         |
| Collector current         | $I_C$     | 400         | 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     | $V_{(BR)CB0}$ | $I_C=10\mu A, I_E=0$          | 55  |      |     | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EB0}$ | $I_E=10\mu A, I_C=0$          | 4   |      |     | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CE0}$ | $I_C=100\mu A, R_{BE}=\infty$ | 50  |      |     | V       |
| Collector cutoff current             | $I_{CBO}$     | $V_{CB}=25V, I_E=0$           |     |      | 1   | $\mu A$ |
| Emitter cutoff current               | $I_{EBO}$     | $V_{EB}=2V, I_C=0$            |     |      | 1   | $\mu A$ |
| DC current gain                      | $h_{FE}$      | $V_{CE}=4V, I_C=100mA$        | 90  |      | 500 |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=200mA, I_B=10mA$         |     | 0.15 | 0.5 | V       |
| Gain bandwidth product               | $f_T$         | $V_{CE}=6V, I_E=-10mA$        |     | 150  |     | MHz     |

■  $h_{FE}$  Classification

| Marking  | TD     | TE      | TF      |
|----------|--------|---------|---------|
| $h_{FE}$ | 90~180 | 150~300 | 250~500 |