

2SC3356 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 0.2 \text{ W (Tamb=25}^\circ\text{C)}$$

Collector current

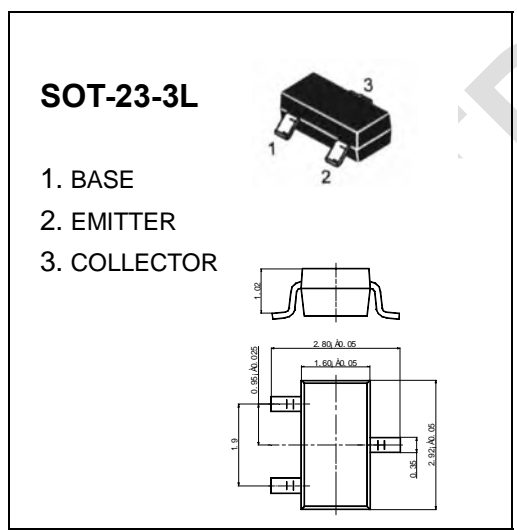
$$I_{CM}: 0.1 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 20 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^\circ\text{C to } +150^\circ\text{C}$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|-------------------------------------|---------------|----------------------------------------------------|-----|-----|-----|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=10\mu\text{A}, I_E=0$ | 20 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=1\text{mA}, I_B=0$ | 12 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=10\mu\text{A}, I_C=0$ | 3 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=10\text{V}, I_E=0$ | | | 1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=1\text{V}, I_C=0$ | | | 1 | μA |
| DC current gain | h_{FE} | $V_{CE}=10\text{V}, I_C=20\text{mA}$ | 50 | | 300 | |
| Transition frequency | f_T | $V_{CE}=10\text{V}, I_C=20\text{mA}$ | 6 | | | GHz |
| Noise figure | NF | $V_{CE}=10\text{V}, I_C=7\text{mA}, f=1\text{GHz}$ | | | 2 | dB |

CLASSIFICATION OF h_{FE}

| Marking | R23 | R24 | R25 |
|---------|--------|--------|---------|
| Rank | Q | R | S |
| Range | 50-100 | 80-160 | 125-250 |