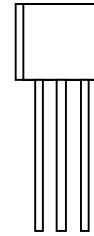




S8550

TRANSISTOR (PNP)

TO-92



- 1. EMITTER
- 2. BASE
- 3. COLLECTOR

1 2 3

FEATURES

Power dissipation

$$P_{CM} : 0.625 \text{ W (} T_{amb}=25^{\circ}\text{C)}$$

Collector current

$$I_{CM} : - 0.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : - 40 \text{ V}$$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|---|------|-----|-------|---------------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100 \mu\text{A}, I_E=0$ | - 40 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=0.1 \text{ mA}, I_B=0$ | - 25 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100 \mu\text{A}, I_C=0$ | - 5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-40 \text{ V}, I_E=0$ | | | - 0.1 | μA |
| Collector cut-off current | I_{CEO} | $V_{CE}=-20 \text{ V}, I_B=0$ | | | - 0.2 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=- 3 \text{ V}, I_C=0$ | | | - 0.1 | μA |
| DC current gain(note) | $H_{FE(1)}$ | $V_{CE}=-1 \text{ V}, I_C= 50\text{mA}$ | 85 | | 300 | |
| | $H_{FE(2)}$ | $V_{CE}=-1 \text{ V}, I_C= 500\text{mA}$ | 50 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-500\text{mA}, I_B= 50 \text{ mA}$ | | | - 0.6 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=-500\text{mA}, I_B= 50 \text{ mA}$ | | | - 1.2 | V |
| Base-emitter voltage | V_{BE} | $I_E=-100\text{mA}$ | | | - 1.4 | V |
| Transition frequency | f_T | $V_{CE}=6 \text{ V}, I_C=20\text{mA}$ $f = 30\text{MHz}$ | 150 | | | MHz |

CLASSIFICATION OF $H_{FE(1)}$

| Rank | B | C | D |
|-------|--------|---------|---------|
| Range | 85-160 | 120-200 | 160-300 |