



S8550LT1

PNP EPITAXIAL SILICON TRANSISTORS

HIGH VOLTAGE TRANSISTOR: (PNP)

FEATURES

Die Size

0.44*0.44mm

Power dissipation

$P_{CM} : 225mW (T_{amb}=25^{\circ}C)$

Collector current

$I_{CM} : 0.5A$

Collector-base voltage

$V_{(BR)CBO} : 40V$

SOT-23



1. BASE

2. EMITTER

3. COLLECTOR

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

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|------------------------|-----|-----|-----|---------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=100\mu A, I_E=0$ | 30 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=1mA, I_B=0$ | 21 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=100\mu A, I_C=0$ | 5.0 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=30V, I_E=0$ | | | 1.0 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=5V, I_C=0$ | | | 100 | nA |
| DC current gain | $H_{FE(1)}$ | $V_{CE}=1V, I_C=150mA$ | 120 | | 400 | |
| | $H_{FE(2)}$ | $V_{CE}=1V, I_C=500mA$ | 40 | | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=500mA, I_B=50mA$ | | | 500 | mV |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=500mA, I_B=50mA$ | | | 1.2 | V |
| Base-emitter voltage | $V_{BE(on)}$ | $I_C=10mA, V_{CE}=1V$ | | | 1.0 | V |

CLASSIFICATION OF $H_{FE(1)}$

| Rank | B9C | B9D | B9E |
|-------|---------|---------|---------|
| Range | 120-200 | 160-300 | 280-400 |