



## SOT-23 Plastic-Encapsulate Transistors

### SS8550LT1 TRANSISTOR (PNP)

#### FEATURES

Power dissipation

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

Collector current

$I_{CM}$ : -1.5 A

Collector-base voltage

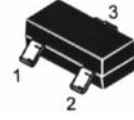
$V_{(BR)CBO}$ : -25 V

Operating and storage junction temperature range

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

#### SOT-23

1. BASE
2. EMITTER
3. COLLECTOR



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

| Parameter                            | Symbol        | Test conditions                             | MIN | MAX  | UNIT    |
|--------------------------------------|---------------|---|-----|------|---------|
| Collector-base breakdown voltage     | $V_{(BR)CBO}$ | $I_C = -100\mu A, I_E = 0$                  | -25 |      | V       |
| Collector-emitter breakdown voltage  | $V_{(BR)CEO}$ | $I_C = -0.1mA, I_B = 0$                     | -20 |      | V       |
| Emitter-base breakdown voltage       | $V_{(BR)EBO}$ | $I_E = -100\mu A, I_C = 0$                  | -5  |      | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB} = -25V, I_E = 0$                    |     | -0.1 | $\mu A$ |
| Collector cut-off current            | $I_{CEO}$     | $V_{CE} = -20V, I_B = 0$                    |     | -0.1 | $\mu A$ |
| Emitter cut-off current              | $I_{EBO}$     | $V_{EB} = -5V, I_C = 0$                     |     | -0.1 | $\mu A$ |
| DC current gain                      | $h_{FE(1)}$   | $V_{CE} = -1V, I_C = -100mA$                | 120 | 350  |         |
|                                      | $h_{FE(2)}$   | $V_{CE} = -1V, I_C = -800mA$                | 40  |      |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C = -800mA, I_B = -80mA$                 |     | -0.3 | V       |
| Base-emitter saturation voltage      | $V_{BE(sat)}$ | $I_C = -800mA, I_B = -80mA$                 |     | -1.2 | V       |
| Transition frequency                 | $f_T$         | $V_{CE} = -10V, I_C = -50mA$<br>$f = 30MHz$ | 100 |      | MHz     |

#### CLASSIFICATION OF $h_{FE(1)}$

| Rank  | L       | H       |
|-------|---------|---------|
| Range | 120-200 | 200-350 |

|                |               |
|----------------|---------------|
| DEVICE MARKING | SS8550LT1=KIY |
|----------------|---------------|