

**FEATURES**

Complimentary to SS8050

Marking : Y2

MAXIMUM RATINGS (TA=25°C unless otherwise noted)



**SS8550 (PNP)**

| Parameter                     | Symbol    | Value       | Unit |
|-------------------------------|-----------|-------------|------|
| Collector-Base Voltage        | $V_{CBO}$ | -40         | V    |
| Collector-Emitter Voltage     | $V_{CEO}$ | -25         | V    |
| Emitter-Base Voltage          | $V_{EBO}$ | -5          | V    |
| Collector Current -Continuous | $I_C$     | -1500       | mA   |
| Collector Power Dissipation   | $P_C$     | 300         | mW   |
| Junction Temperature          | $T_J$     | 150         | °C   |
| Storage Temperature           | $T_{stg}$ | -55 to +150 | °C   |



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

| Parameter                            | Symbol        | Test conditions                       | Min | Max   | Unit    |
|--------------------------------------|---------------|---------------------------------------|-----|-------|---------|
| Collector-base breakdown voltage     | $V_{CBO}$     | $I_C=-100\mu A, I_E=0$                | -40 |       | V       |
| Collector-emitter breakdown voltage  | $V_{CEO}$     | $I_C=-0.1mA, I_B=0$                   | -25 |       | V       |
| Emitter-base breakdown voltage       | $V_{EBO}$     | $I_E=-100\mu A, I_C=0$                | -5  |       | V       |
| Collector cut-off current            | $I_{CBO}$     | $V_{CB}=-40V, I_E=0$                  |     | -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 | 400   |         |
|                                      | $h_{FE(2)}$   | $V_{CE}=-1V, I_C=-800mA$              | 40  |       |         |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-800mA, I_B=-80mA$               |     | -0.5  | V       |
| Base-emitter saturation voltage      | $V_{BE(sat)}$ | $I_C=-800mA, I_B=-80mA$               |     | -1.2  | V       |
| Base-emitter on voltage              | $V_{BE(on)}$  | $I_C=-1V, V_{CE}=-10mA$               |     | -1    | V       |
| Base-emitter positive favor voltage  | $V_{BEF}$     | $I_B=-1A$                             |     | -1.55 | V       |
| Transition frequency                 | $f_T$         | $V_{CE}=-10V, I_C=-50mA$<br>$f=30MHz$ | 100 |       | MHz     |
| output capacitance                   | $C_{ob}$      | $(V_{CB}=-10V, I_E=0, f=1MHz)$        |     | 20    | pF      |

**CLASSIFICATION OF  $h_{FE}$**

| Rank  | L       | H       | J       |
|-------|---------|---------|---------|
| Range | 120-200 | 200-350 | 300-400 |

**SS8550** Typical Characteristics

