

# General Purpose Transistors

## PNP Silicon

### FEATURE

- High current capacity in compact package.  
 $I_C = -1.5A$ .
- Epitaxial planar type.
- PNP complement: LH8550
- Pb-Free Package is available.
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable

### DEVICE MARKING AND ORDERING INFORMATION

| Device          | Marking | Shipping        |
|-----------------|---------|-----------------|
| (S-)LH8550PLT1G | KIO     | 3000/Tape&Reel  |
| (S-)LH8550PLT3G | KIO     | 10000/Tape&Reel |
| (S-)LH8550QLT1G | KIY     | 3000/Tape&Reel  |
| (S-)LH8550QLT3G | KIY     | 10000/Tape&Reel |

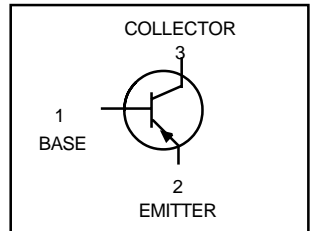
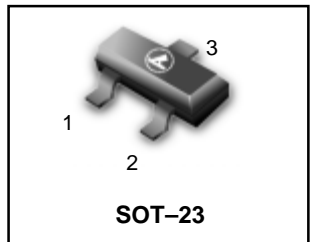
### MAXIMUM RATINGS

| Rating                       | Symbol    | Max   | Unit |
|------------------------------|-----------|-------|------|
| Collector-Emitter Voltage    | $V_{CEO}$ | -50   | V    |
| Collector-Base Voltage       | $V_{CBO}$ | -50   | V    |
| Emitter-Base Voltage         | $V_{EBO}$ | -6    | V    |
| Collector Current-continuoun | $I_C$     | -1500 | mAdc |

### THERMAL CHARACTERISTICS

| Characteristic                   | Symbol         | Max         | Unit |
|----------------------------------|----------------|-------------|------|
| Total Dissipation Power          | $P_D$          | 225         | mW   |
| Junction and Storage Temperature | $T_j, T_{stg}$ | -55 to +150 | °C   |

LH8550PLT1G  
Series  
S-LH8550PLT1G  
Series



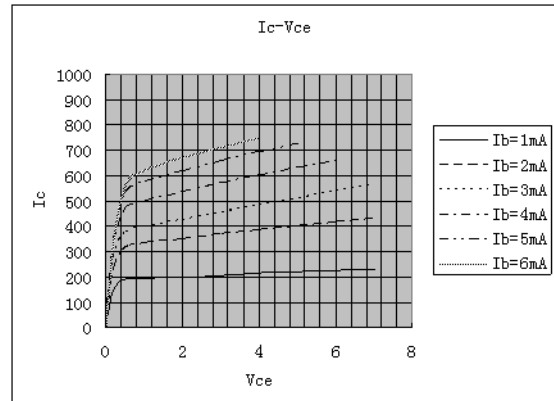
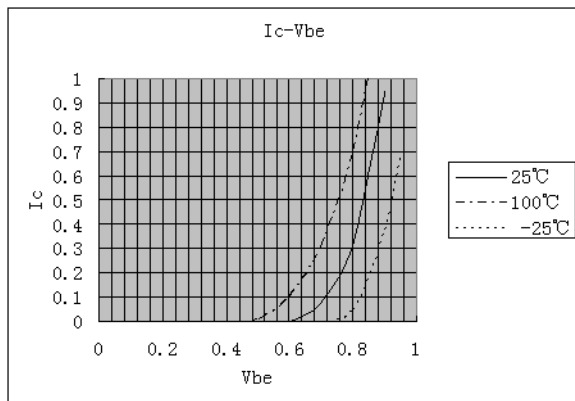
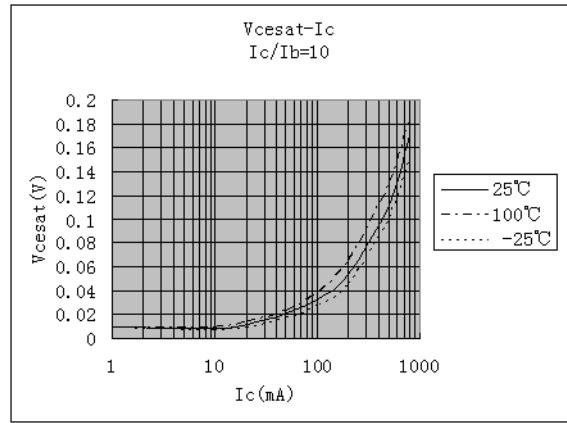
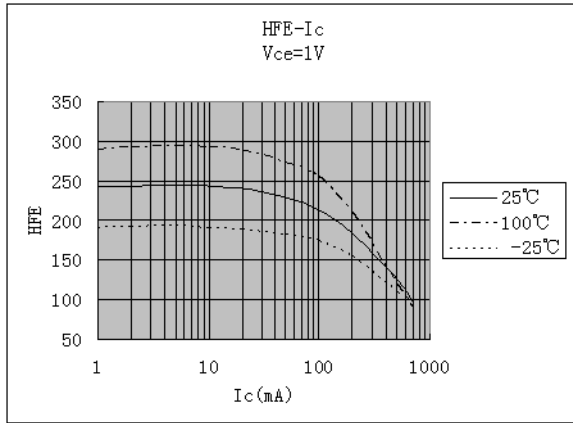
LH8550PLTIG Series,S-LH8550PLTIG Series

ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

| Characteristic   | Symbol               | Min | Typ   | Max  | Unit |
|--|----------------------|-----|-------|------|------|
| Collector-Emitter Breakdown Voltage<br>(I <sub>C</sub> =-2.0mA, I <sub>E</sub> =0)     | V <sub>(BR)CEO</sub> | -50 | -     | -    | V    |
| Emitter-Base Breakdown Voltage<br>(I <sub>E</sub> =-100μA, I <sub>C</sub> =0)          | V <sub>(BR)EBO</sub> | -6  | -     | -    | V    |
| Collector-Base Breakdown Voltage<br>(I <sub>C</sub> =-100μA, I <sub>E</sub> =0)        | V <sub>(BR)CBO</sub> | -50 | -     | -    | V    |
| Collector Cutoff Current (V <sub>CE</sub> =-35V, I <sub>E</sub> =0)                    | I <sub>CBO</sub>     | -   | -     | -100 | nA   |
| Emitter Cutoff Current (V <sub>EB</sub> =-6V, I <sub>C</sub> =0)                       | I <sub>EBO</sub>     | -   | -     | -100 | nA   |
| Base-Emitter Voltage (V <sub>CE</sub> =-1V, I <sub>C</sub> =-10mA)                     | V <sub>BE</sub>      | -   | -0.66 | -1   | V    |
| DC Current Gain<br>I <sub>C</sub> =-100mA, V <sub>CE</sub> =-1V                        | h <sub>FE</sub> *    | 100 | -     | 320  |      |
| DC Current Gain<br>I <sub>C</sub> =-800mA, V <sub>CE</sub> =-1V                        | h <sub>FE</sub>      | 40  | -     | -    |      |
| Collector-Emitter Saturation Voltage<br>(I <sub>C</sub> =-800mA I <sub>B</sub> =-80mA) | V <sub>CE(S)</sub>   | -   | -     | -0.5 | V    |

NOTE :

| *               | P       | Q       |
|-----------------|---------|---------|
| h <sub>FE</sub> | 100~200 | 160~320 |

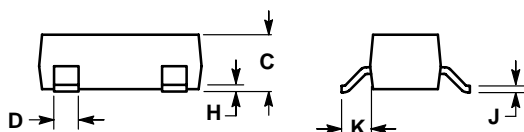
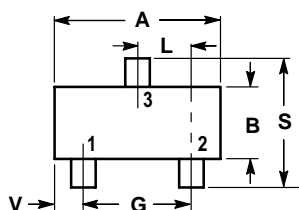
**LH8550PLTIG Series, S-LH8550PLTIG Series**
**Electrical Characteristic Curves ( $T_A=25^\circ\text{C}$ )**


LH8550PLTIG Series, S-LH8550PLTIG Series

SOT-23

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.



| DIM | INCHES |        | MILLIMETERS |       |
|-----|--------|--------|-------------|-------|
|     | MIN    | MAX    | MIN         | MAX   |
| A   | 0.1102 | 0.1197 | 2.80        | 3.04  |
| B   | 0.0472 | 0.0551 | 1.20        | 1.40  |
| C   | 0.0350 | 0.0440 | 0.89        | 1.11  |
| D   | 0.0150 | 0.0200 | 0.37        | 0.50  |
| G   | 0.0701 | 0.0807 | 1.78        | 2.04  |
| H   | 0.0005 | 0.0040 | 0.013       | 0.100 |
| J   | 0.0034 | 0.0070 | 0.085       | 0.177 |
| K   | 0.0140 | 0.0285 | 0.35        | 0.69  |
| L   | 0.0350 | 0.0401 | 0.89        | 1.02  |
| S   | 0.0830 | 0.1039 | 2.10        | 2.64  |
| V   | 0.0177 | 0.0236 | 0.45        | 0.60  |

PIN 1. BASE  
 2. EMITTER  
 3. COLLECTOR

