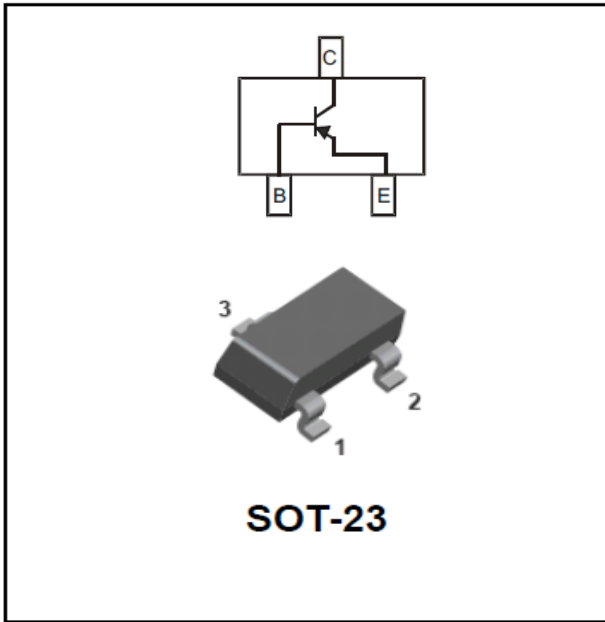


## PNP General Purpose Amplifier



### Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture Sensitivity Level 1
- Marking:

|         |         |
|---------|---------|
| S8550-L | 2TY • L |
| S8550-H | 2TY     |

### ■ Maximum Ratings (Ta=25°C unless otherwise noted)

| Item                           | Symbol    | Unit | Conditions                 | Value       |
|--------------------------------|-----------|------|----------------------------|-------------|
| Collector-Base Voltage         | $V_{CBO}$ | V    | $I_C = -100\mu A, I_E = 0$ | -40         |
| Collector-Emitter Voltage      | $V_{CEO}$ | V    | $I_C = -100\mu A, I_B = 0$ | -25         |
| Emitter-Base Voltage           | $V_{EBO}$ | V    | $I_E = -100\mu A, I_C = 0$ | -5          |
| Collector Current              | $I_C$     | mA   |                            | -500        |
| Collector Power Dissipation    | $P_C$     | mW   |                            | 300         |
| Operation Junction Temperature | $T_j$     | °C   |                            | 150         |
| Storage Temperature            | $T_{stg}$ | °C   |                            | -55 to +150 |

### ■ Electrical Characteristics (Ta=25°C unless otherwise noted)

| Item                                 | Symbol        | Unit | Conditions                             | Min | Typ | Max  |
|--------------------------------------|---------------|------|--|-----|-----|------|
| Collector-base breakdown voltage     | $V_{CBO}$     | V    | $I_C = -100\mu A, I_E = 0$             | -40 |     |      |
| Collector-emitter breakdown voltage  | $V_{CEO}$     | V    | $I_C = -100\mu A, I_B = 0$             | -25 |     |      |
| Emitter-base breakdown voltage       | $V_{EBO}$     | V    | $I_E = -100\mu A, I_C = 0$             | -5  |     |      |
| Collector-Emitter cut-off current    | $I_{CEX}$     | nA   | $V_{CE} = -20V, V_{BE} = -3V$          |     |     | -100 |
| Collector-base cut-off current       | $I_{CBO}$     | nA   | $V_{CB} = -40V, I_E = 0$               |     |     | -100 |
| Emitter-base cut-off current         | $I_{EBO}$     | nA   | $V_{EB} = -5V, I_C = 0$                |     |     | -100 |
| DC current gain                      | $h_{FE(1)}$   |      | $V_{CE} = -1V, I_C = -50mA$            | 120 |     | 350  |
|                                      | $h_{FE(2)}$   |      | $V_{CE} = -1V, I_C = -500mA$           | 50  |     |      |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | V    | $I_C = -500mA, I_B = -50mA$            |     |     | -0.6 |
| Base-emitter saturation voltage      | $V_{BE(sat)}$ | V    | $I_C = -500mA, I_B = -50mA$            |     |     | -1.2 |
| Transition frequency                 | $f_T$         | MHz  | $V_{CE} = -6V, I_C = -20mA, f = 30MHz$ | 150 |     |      |



# S8550-L THRU S8550-H

RoHS  
COMPLIANT

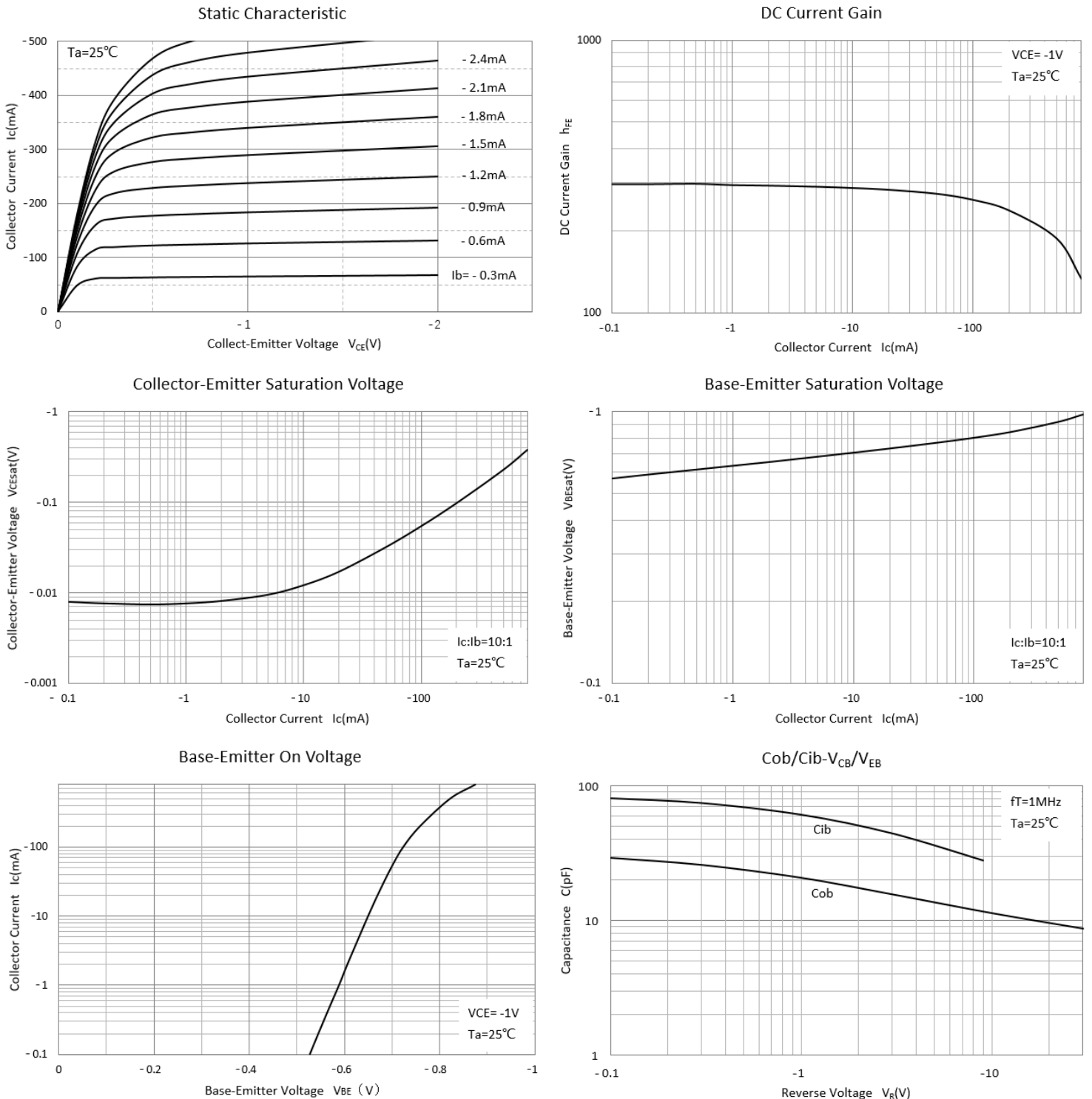
## CLASSIFICATION OF HFE

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

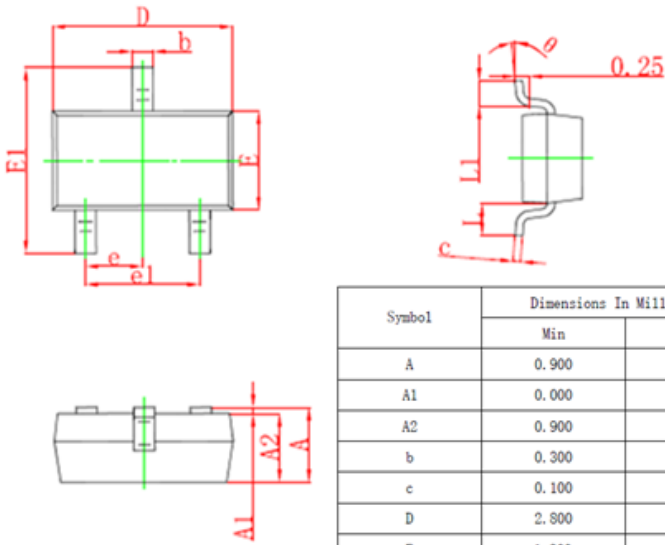
## Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g)    | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| S8550         | F2           | Approximate 0.008 | 3000                 | 30000                   | 120000                     | 7" reel       |

## Characteristics (Typical)

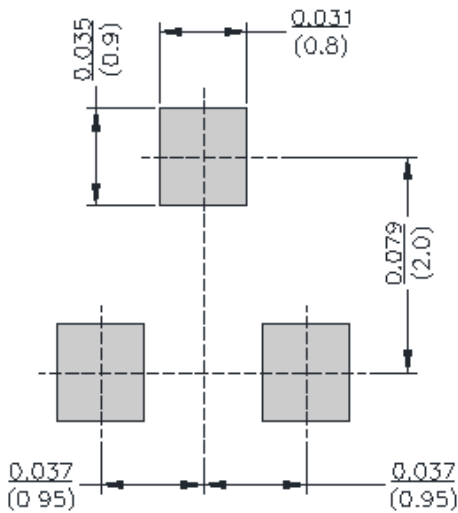


## ■SOT-23 Package Outline Dimensions



| Symbol | Dimensions In Millimeters |       | Dimensions In Inches |       |
|--------|---------------------------|-------|----------------------|-------|
|        | Min                       | Max   | Min                  | Max   |
| A      | 0.900                     | 1.150 | 0.035                | 0.045 |
| A1     | 0.000                     | 0.100 | 0.000                | 0.004 |
| A2     | 0.900                     | 1.050 | 0.035                | 0.041 |
| b      | 0.300                     | 0.500 | 0.012                | 0.020 |
| c      | 0.100                     | 0.200 | 0.004                | 0.008 |
| D      | 2.800                     | 3.000 | 0.110                | 0.118 |
| E      | 1.200                     | 1.400 | 0.047                | 0.055 |
| E1     | 2.250                     | 2.550 | 0.089                | 0.100 |
| e      | 0.950TYP                  |       | 0.037TYP             |       |
| e1     | 1.800                     | 2.000 | 0.071                | 0.079 |
| L      | 0.550REF                  |       | 0.022REF             |       |
| L1     | 0.300                     | 0.500 | 0.012                | 0.020 |
| ø      | 0°                        | 8°    | 0°                   | 8°    |

## ■SOT-23 Soldering Footprint





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