



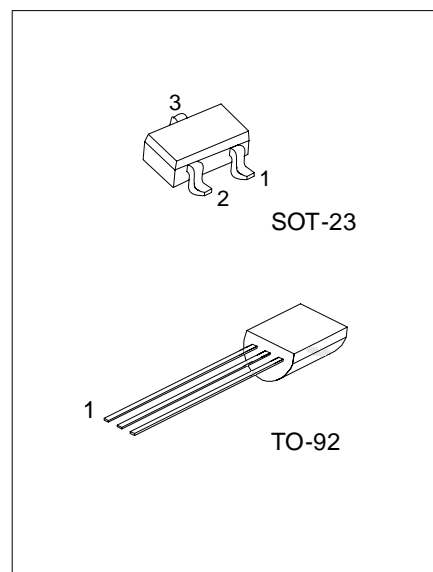
8550S

PNP SILICON TRANSISTOR

LOW VOLTAGE HIGH CURRENT SMALL SIGNAL PNP TRANSISTOR

FEATURES

- *Collector current up to 700mA
- *Collector-Emitter voltage up to 20 V
- *Complimentary to 8550S



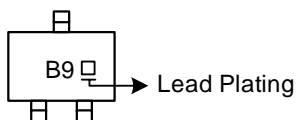
*Pb-free plating product number: 8550SL

ORDERING INFORMATION

| Order Number | | Package | Pin Assignment | | | Packing |
|---------------|-------------------|---------|----------------|---|---|-----------|
| Normal | Lead Free Plating | | 1 | 2 | 3 | |
| 8550S-x-AE3-R | 8550SL-x-AE3-R | SOT-23 | E | B | C | Tape Reel |
| 8550S-x-T92-B | 8550SL-x-T92-B | TO-92 | E | C | B | Tape Box |
| 8550S-x-T92-K | 8550SL-x-T92-K | TO-92 | E | C | B | Bulk |

| | |
|---|--|
| <p>8550SL-x-AE3-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Rank</p> <p>(4)Lead Plating</p> | <p>(1) B: Tape Box, K: Bulk, R: Tape Reel</p> <p>(2) AE3: SOT-23, T92: TO-92</p> <p>(3) x: refer to Classification of h_{FE2}</p> <p>(4) L: Lead Free Plating, Blank: Pb/Sn</p> |
|---|--|

MARKING (For SOT-23 Package)



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25 °C)

| PARAMETER | SYMBOL | RATING | UNITS |
|---------------------------------|------------------|------------|-------|
| Collector-Base Voltage | V _{CB0} | -30 | V |
| Collector-Emitter Voltage | V _{CE0} | -20 | V |
| Emitter-Base Voltage | V _{EB0} | -5 | V |
| Collector Dissipation(Ta=25 °C) | SOT-23 | 350 | mW |
| | TO-92 | 1 | W |
| Collector Current | I _C | -700 | mA |
| Junction Temperature | T _J | +150 | °C |
| Storage Temperature | T _{STG} | -40 ~ +150 | °C |

Note Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta= 25 °C, unless otherwise specified)

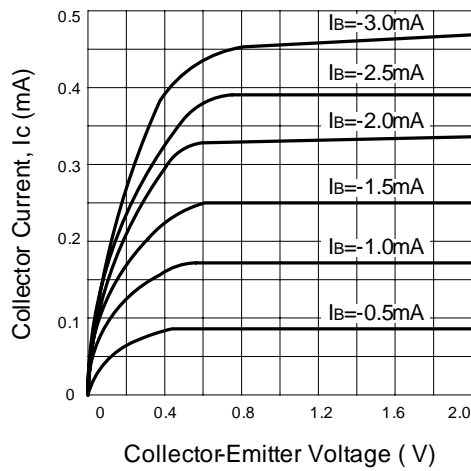
| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|--------------------------------------|----------------------|--|-----|-----|------|------|
| Collector-Base Breakdown Voltage | BV _{CB0} | I _C =-100μA, I _E =0 | -30 | | | V |
| Collector-Emitter Breakdown Voltage | BV _{CE0} | I _C =-1mA, I _B =0 | -20 | | | V |
| Emitter-Base Breakdown Voltage | BV _{EB0} | I _E =-100μA, I _C =0 | -5 | | | V |
| Collector Cut-off Current | I _{CB0} | V _{CB} =-30V, I _E =0 | | | -1 | μA |
| Emitter Cut-off Current | I _{EB0} | V _{EB} =-5V, I _C =0 | | | -100 | nA |
| DC Current Gain | h _{FE1} | V _{CE} =-1V, I _C =-1mA | 100 | | | |
| | h _{FE2} | V _{CE} =-1V, I _C =-150 mA | 120 | | 400 | |
| | h _{FE3} | V _{CE} =-1V, I _C =-500mA | 40 | | | |
| Collector-Emitter Saturation Voltage | V _{CE(SAT)} | I _C =-500mA, I _B =-50mA | | | -0.5 | V |
| Base-Emitter Saturation Voltage | V _{BE(SAT)} | I _C =-500mA, I _B =-50mA | | | -1.2 | V |
| Base-Emitter Saturation Voltage | V _{BE} | V _{CE} =-1V, I _C =-10mA | | | -1.0 | V |
| Current Gain Bandwidth Product | f _T | V _{CE} =-10V, I _C =-50mA | 100 | | | MHz |
| Output Capacitance | C _{ob} | V _{CB} =-10V, I _E =0, f=1MHz | | 9.0 | | pF |

■ CLASSIFICATION OF h_{FE2}

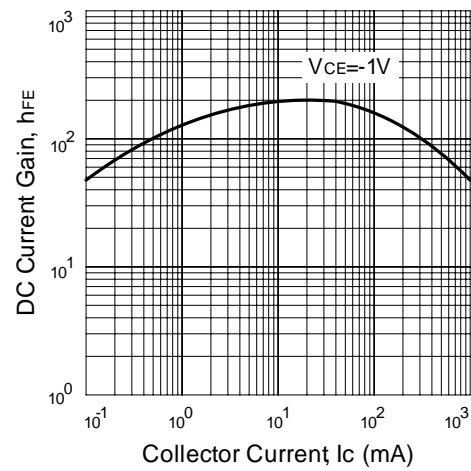
| RANK | C | D | E |
|-------|---------|---------|---------|
| RANGE | 120-200 | 160-300 | 280-400 |

TYPICAL CHARACTERISTICS

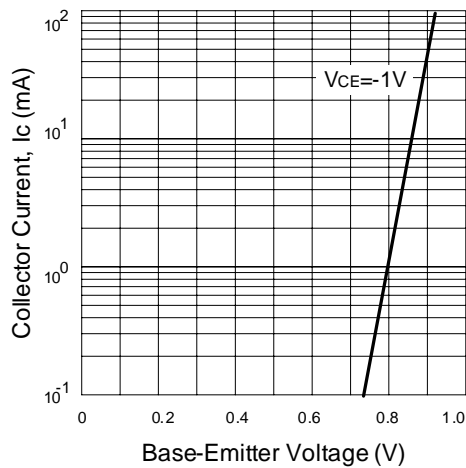
Static Characteristics



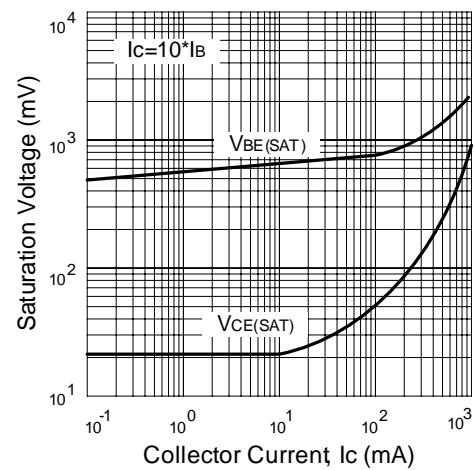
DC Current Gain



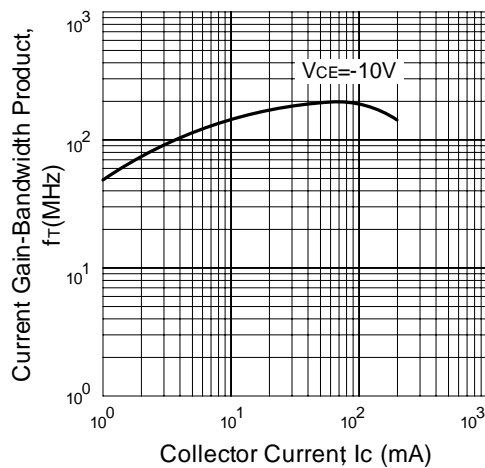
Base-Emitter on Voltage



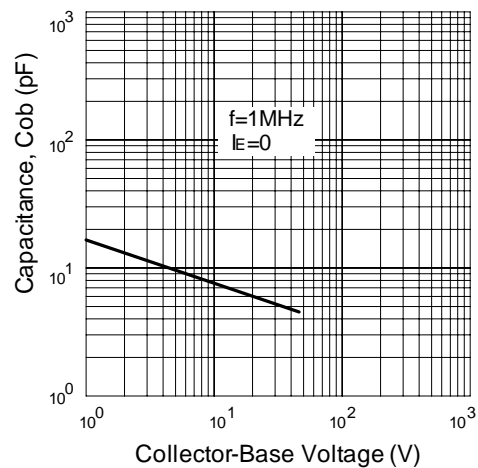
Saturation Voltage



Current Gain-Bandwidth Product



Collector Output Capacitance



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