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# KSE350

## High Voltage General Purpose Applications

- High Collector-Emitter Breakdown Voltage
- Suitable for Transformer
- Complement to KSE340



## PNP Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

| Symbol    | Parameter  | Value      | Units            |
|-----------|--|------------|------------------|
| $V_{CBO}$ | Collector-Base Voltage                           | - 300      | V                |
| $V_{CEO}$ | Collector-Emitter Voltage                        | - 300      | V                |
| $V_{EBO}$ | Emitter-Base Voltage                             | - 5        | V                |
| $I_C$     | Collector Current                                | - 500      | mA               |
| $P_C$     | Collector Dissipation ( $T_C=25^\circ\text{C}$ ) | 20         | W                |
| $T_J$     | Junction Temperature                             | 150        | $^\circ\text{C}$ |
| $T_{STG}$ | Storage Temperature                              | - 65 ~ 150 | $^\circ\text{C}$ |

### Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

| Symbol     | Parameter                           | Test Condition                               | Min. | Max. | Units         |
|------------|-------------------------------------|--|------|------|---------------|
| $BV_{CEO}$ | Collector-Emitter Breakdown Voltage | $I_C = - 1\text{mA}, I_B = 0$                | -300 |      | V             |
| $I_{CBO}$  | Collector Cut-off Current           | $V_{CB} = - 300\text{V}, I_E = 0$            |      | -100 | $\mu\text{A}$ |
| $I_{EBO}$  | Emitter Cut-off Current             | $V_{BE} = - 3\text{V}, I_C = 0$              |      | -100 | $\mu\text{A}$ |
| $h_{FE}$   | DC Current Gain                     | $V_{CE} = - 10\text{V}, I_C = - 50\text{mA}$ | 30   | 240  |               |

# Typical Characteristics

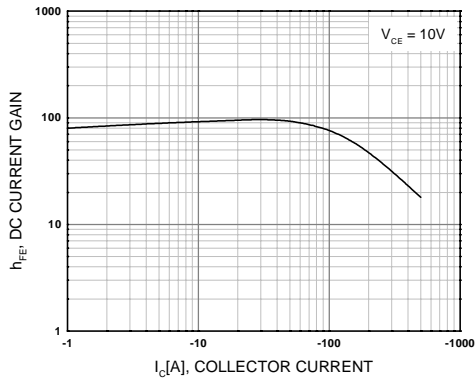


Figure 1. DC current Gain

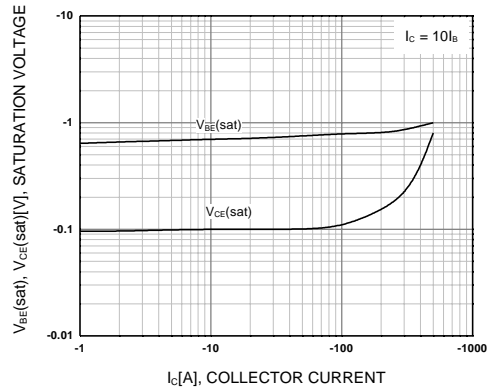


Figure 2. Base-Emitter Saturation Voltage  
Collector-Emitter Saturation Voltage

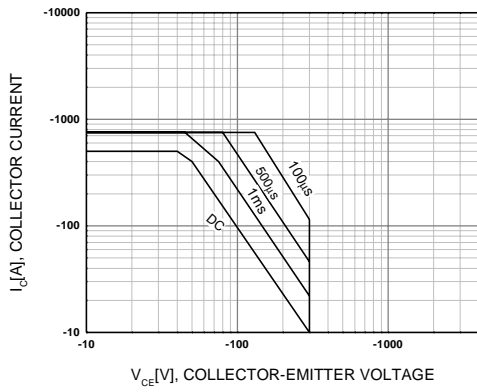


Figure 3. Safe Operating Area

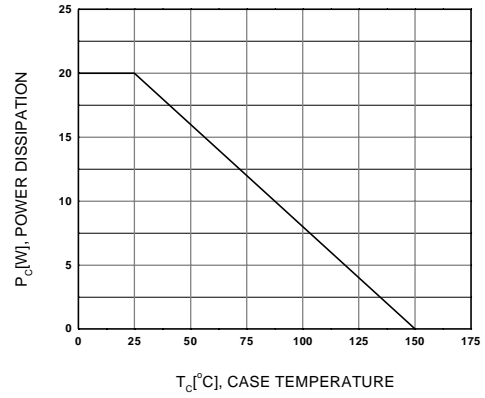


Figure 4. Power Derating

# Package Dimensions

## TO-126



Dimensions in Millimeters

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