

**isc Silicon PNP Power Transistor**
**2SB1184**
**DESCRIPTION**

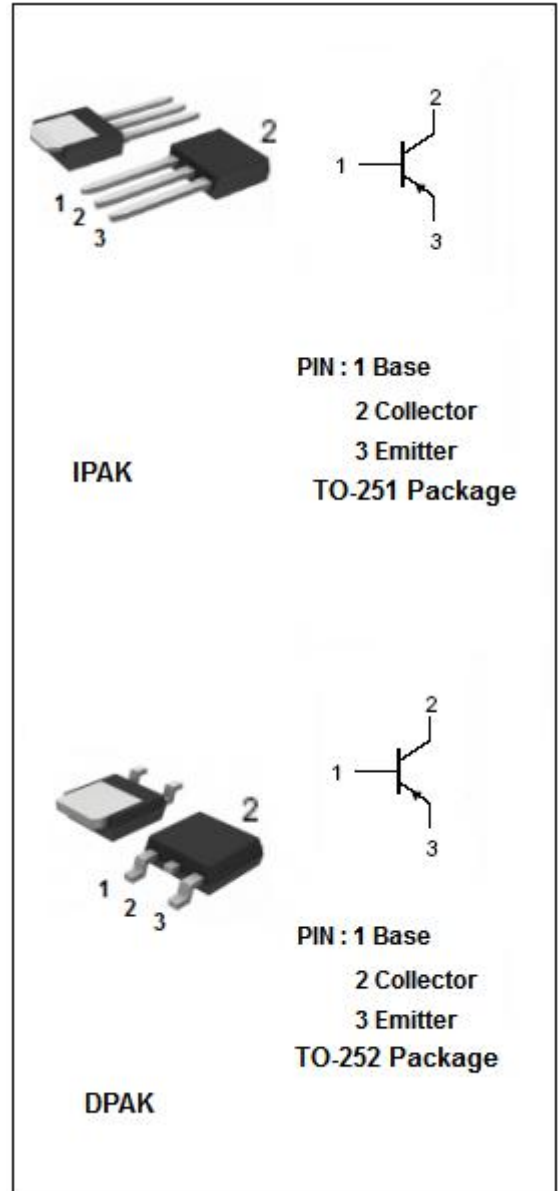
- Low  $V_{CE(sat)}$
- Small and slim package
- Complements the 2SD1760/2SD1864
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Power dissipation

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )**

| SYMBOL    | PARAMETER  | VALUE   | UNIT             |
|-----------|--|---------|------------------|
| $V_{CBO}$ | Collector-Base Voltage                               | -60     | V                |
| $V_{CEO}$ | Collector-Emitter Voltage                            | -50     | V                |
| $V_{EBO}$ | Emitter-Base Voltage                                 | -5      | V                |
| $I_C$     | Collector Current-Continuous                         | -3      | A                |
| $P_C$     | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 1.0     | W                |
| $T_J$     | Junction Temperature                                 | 150     | $^\circ\text{C}$ |
| $T_{stg}$ | Storage Temperature Range                            | -55~150 | $^\circ\text{C}$ |



## isc Silicon PNP Power Transistor

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## ELECTRICAL CHARACTERISTICS

 $T_c=25^\circ\text{C}$  unless otherwise specified

| SYMBOL        | PARAMETER                            | CONDITIONS                           | MIN | TYP. | MAX  | UNIT    |
|---------------|--------------------------------------|--------------------------------------|-----|------|------|---------|
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -2A; I_B = -200mA$            |     |      | -1.0 | V       |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage      | $I_C = -2A; I_B = -200mA$            |     |      | -1.5 | V       |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage     | $I_C = -50\mu A; I_B = 0$            | -60 |      |      | V       |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage  | $I_C = -1mA; I_B = 0$                | -50 |      |      | V       |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage       | $I_E = -50\mu A; I_C = 0$            | -5  |      |      | V       |
| $I_{CBO}$     | Collector Cutoff Current             | $V_{CB} = -20V; I_E = 0$             |     |      | -1.0 | $\mu A$ |
| $I_{EBO}$     | Emitter Cutoff Current               | $V_{EB} = -4V; I_C = 0$              |     |      | -1.0 | $\mu A$ |
| $h_{FE}$      | DC Current Gain                      | $I_C = -0.5A; V_{CE} = -3V$          | 82  |      | 390  |         |
| $C_{OB}$      | Output Capacitance                   | $I_E = 0; V_{CB} = -10V; f = 1.0MHz$ |     | 70   |      | pF      |
| $f_T$         | Current-Gain—Bandwidth Product       | $I_C = -500mA; V_{CE} = -5V$         |     | 50   |      | MHz     |

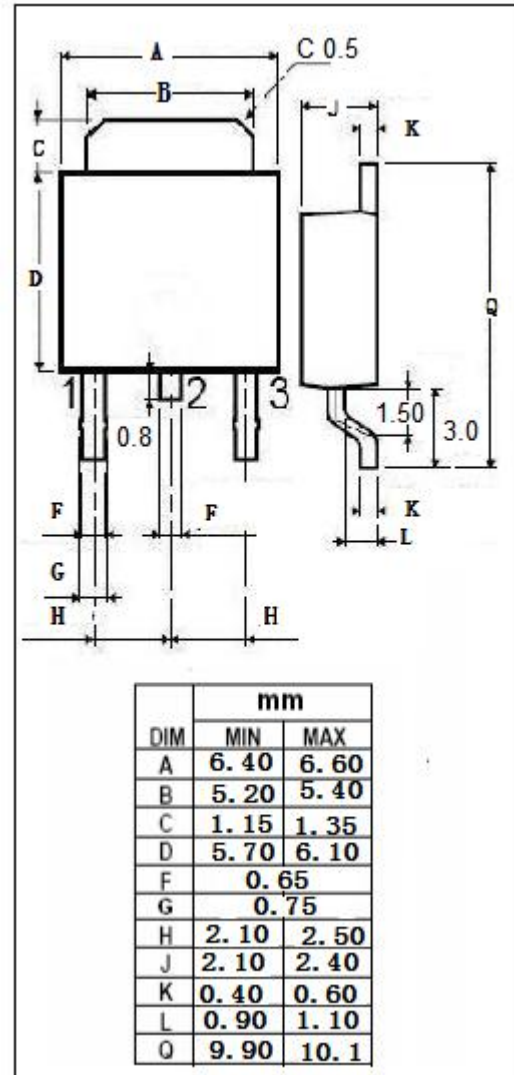
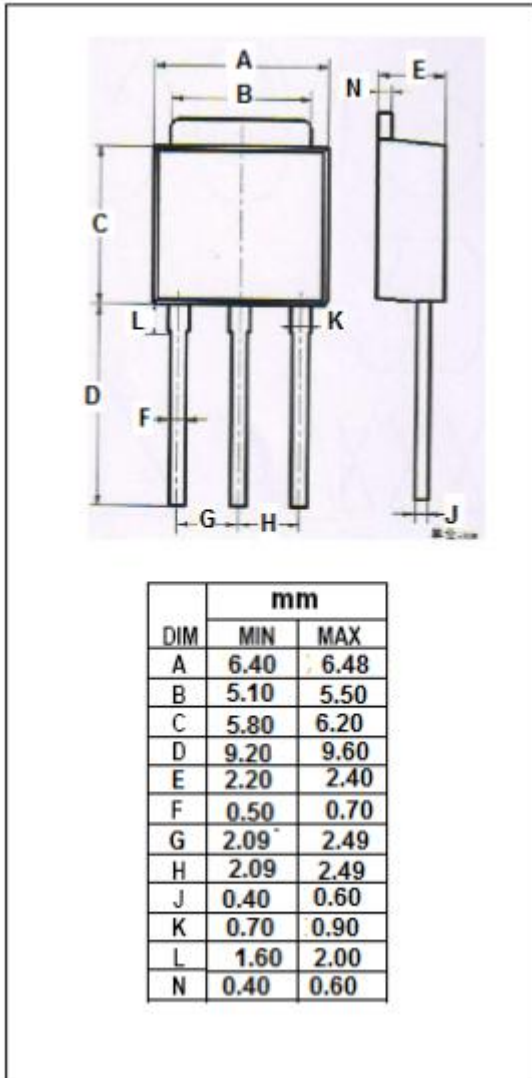
◆  $h_{FE}$  Classifications

| P      | Q       | R       |
|--------|---------|---------|
| 82-180 | 120-270 | 180-390 |

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Outline Drawing



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