

isc Silicon PNP Power Transistor
2SB855
DESCRIPTION

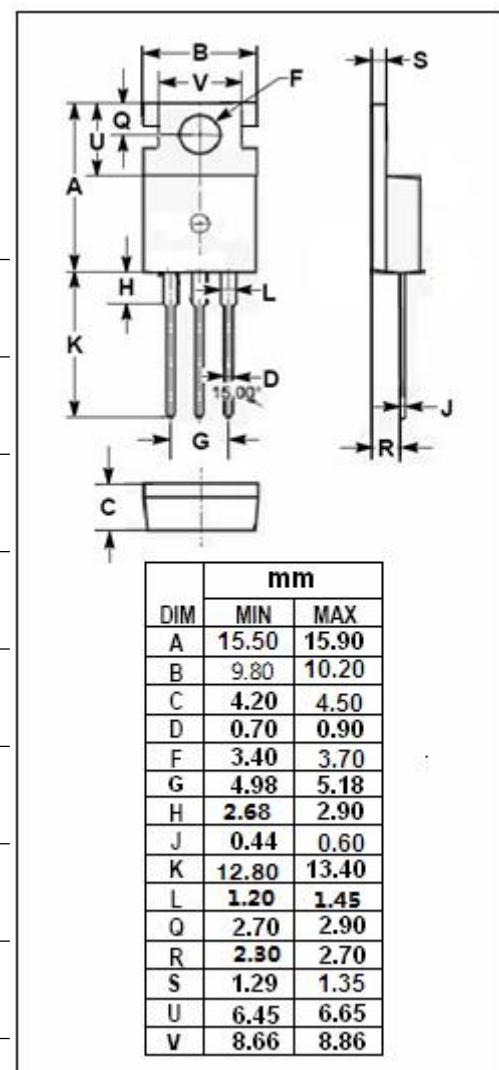
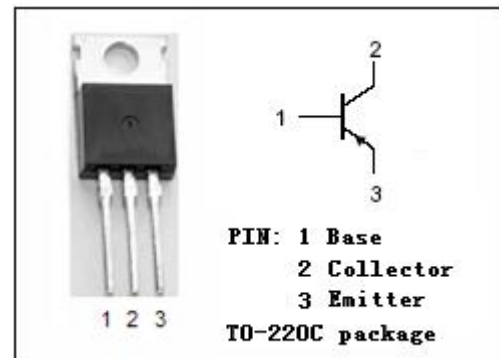
- Collector Current: $I_C = -2A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.2V(\text{Max})@I_C = -2A$
- High Collector Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -50 | V |
| V_{CEO} | Collector-Emitter Voltage | -50 | V |
| V_{EBO} | Emitter-Base Voltage | -4 | V |
| I_C | Collector Current-Continuous | -2 | A |
| P_C | Total Power Dissipation @ $T_c = 25^\circ\text{C}$ | 20 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -45~150 | $^\circ\text{C}$ |



isc Silicon PNP Power Transistor**2SB855****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|--|-----|------|------|---------------|
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C = -30\text{mA}$; $R_{BE} = \infty$ | -50 | | | V |
| $V_{(BR)CBO}$ | Collector-Base Breakdown Voltage | $I_C = -5\text{mA}$; $I_E = 0$ | -50 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E = -5\text{mA}$; $I_C = 0$ | -4 | | | V |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -2\text{A}$; $I_B = -0.2\text{A}$ | | | -1.2 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $I_C = -1\text{A}$; $V_{CE} = -4\text{V}$ | | | -1.5 | V |
| I_{CBO} | Collector Cutoff Current | $V_{CB} = -20\text{V}$; $I_E = 0$ | | | -100 | μA |
| h_{FE-1} | DC Current Gain | $I_C = -1\text{A}$; $V_{CE} = -4\text{V}$ | 35 | | 200 | |
| h_{FE-2} | DC Current Gain | $I_C = -0.1\text{A}$; $V_{CE} = -4\text{V}$ | 35 | | | |
| f_T | Current-Gain—Bandwidth Product | $I_C = -0.5\text{A}$; $V_{CE} = -4\text{V}$ | | 35 | | MHz |

◆ h_{FE-1} Classifications

| A | B | C |
|-------|--------|---------|
| 35-70 | 60-120 | 100-200 |

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