

isc Silicon PNP Power Transistor
2SB1335
DESCRIPTION

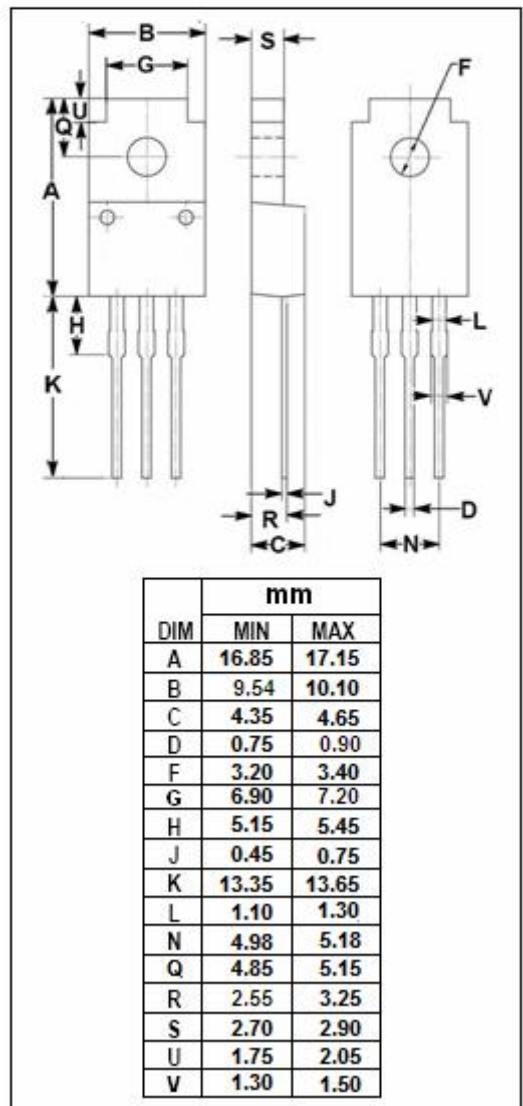
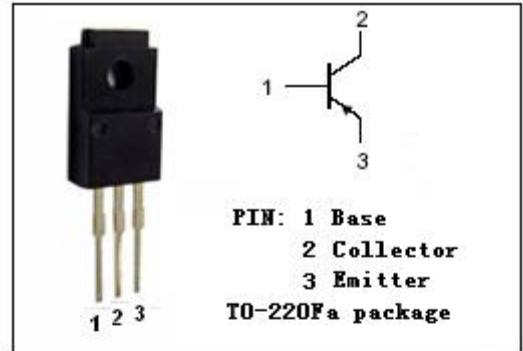
- High Collector Current: $I_C = -4A$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1.5V(\text{Max}) @ I_C = -3A$
- Wide Area of Safe Operation
- Complement to Type 2SD1855
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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 | -80 | V |
| V_{CEO} | Collector-Emitter Voltage | -60 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -4 | A |
| I_{CM} | Collector Current-Peak | -6 | A |
| P_C | Total Power Dissipation @ $T_C = 25^\circ\text{C}$ | 30 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature Range | -55~150 | $^\circ\text{C}$ |



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|--|-----|------|------|------|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = -1mA; I _B = 0 | -60 | | | V |
| V _{(BR)CBO} | Collector-Base Breakdown Voltage | I _C = -50 μ A; I _E = 0 | -80 | | | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = -50 μ A; I _C = 0 | -5 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -3A; I _B = -0.3A | | | -1.5 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = -3A; I _B = -0.3A | | | -1.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -80V; I _E = 0 | | | -10 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -4V; I _C = 0 | | | -10 | μ A |
| h _{FE} | DC Current Gain | I _C = -1A; V _{CE} = -5V | 60 | | 320 | |
| C _{OB} | Output Capacitance | I _E =0; V _{CB} = -10V; f= 1MHz | | 100 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _E = 0.5A; V _{CE} = -5V | | 12 | | MHz |

◆ h_{FE} Classifications

| D | E | F |
|--------|---------|---------|
| 60-120 | 100-200 | 160-320 |

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