

isc Silicon PNP Power Transistor

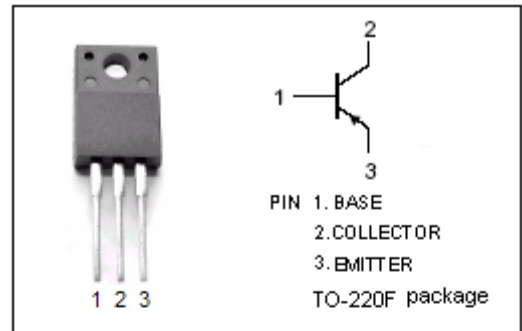
2SB1569

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min})$
- Complement to Type 2SD2400

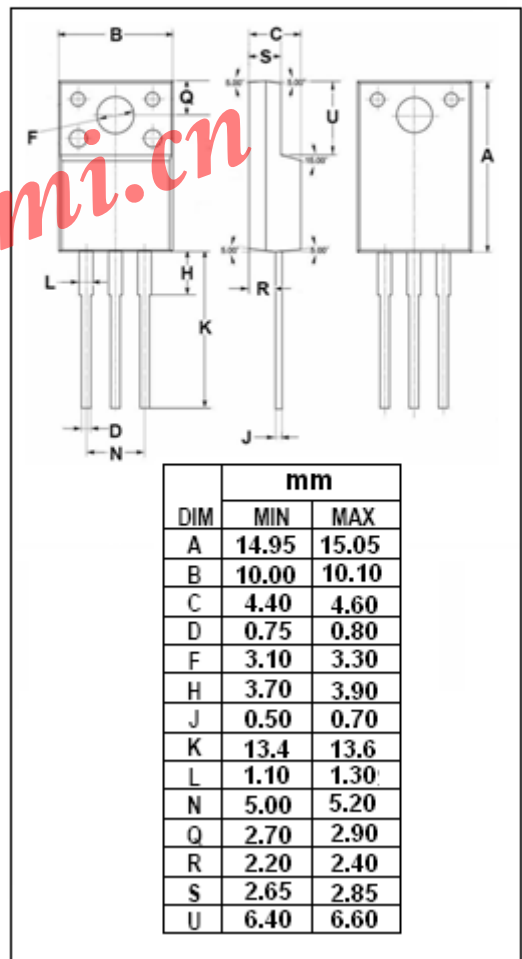
APPLICATIONS

- Designed for power amplifier applications.



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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------------|
| V_{CBO} | Collector-Base Voltage | -120 | V |
| V_{CEO} | Collector-Emitter Voltage | -120 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -1.5 | A |
| I_{CM} | Collector Current-Peak | -3.0 | A |
| P_C | Collector Power Dissipation @ $T_a=25^\circ\text{C}$ | 2 | W |
| | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 20 | |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -55~150 | $^\circ\text{C}$ |



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ELECTRICAL CHARACTERISTICS

T_j=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 | -120 | | | V |
| V _{(BR)CBO} | Collector-Base Breakdown Voltage | I _C = -50 μ A; I _E = 0 | -120 | | | 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 = -1A; I _B = -0.1A | | | -2.0 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C = -1A; I _B = -0.1A | | | -1.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -120V; I _E = 0 | | | -1.0 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -4V; I _C = 0 | | | -1.0 | μ A |
| h _{FE} | DC Current Gain | I _C = -1A; V _{CE} = -5V | 100 | | 200 | |
| f _T | Current-Gain—Bandwidth Product | I _C = -0.1A; V _{CE} = -5V; f _{test} = 30MHz | | 50 | | MHz |
| C _{OB} | Collector Output Capacitance | I _E = 0; V _{CE} = -10V; f _{test} = 1MHz | | 30 | | pF |