

isc Silicon PNP Power Transistors

2SB557

DESCRIPTION

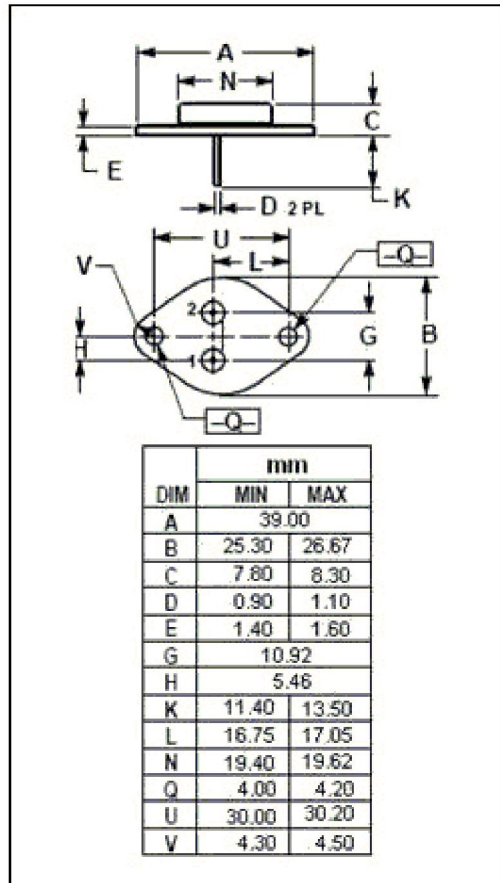
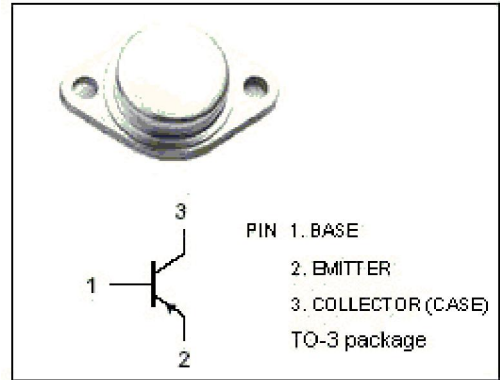
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -120V(\text{Min})$
- High Power Dissipation-
: $P_C = 80W(\text{Max})@T_C=25^\circ\text{C}$
- Complement to Type 2SD427

APPLICATIONS

- Designed for power amplifier applications.
- Recommended for 50W high-fidelity audio frequency amplifier output stage.

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 | -8 | A |
| I_E | Emitter Current-Continuous | 8 | A |
| P_C | Collector Power Dissipation @ $T_C=25^\circ\text{C}$ | 80 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{stg} | Storage Temperature | -65~150 | $^\circ\text{C}$ |



isc Silicon PNP Power Transistors**2SB557****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 = -0.1A; I _B = 0 | -120 | | | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = -10mA; I _C = 0 | -5 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = -5A; I _B = -0.5A | | | -2.5 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = -5A; V _{CE} = -5V | | | -2.0 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = -60V; I _E = 0 | | | -0.1 | mA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = -5V; I _C = 0 | | | -0.1 | mA |
| h _{FE-1} | DC Current Gain | I _C = -1A; V _{CE} = -5V | 40 | | 140 | |
| h _{FE-2} | DC Current Gain | I _C = -5A; V _{CE} = -5V | 20 | | | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f= 1MHz | | 280 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _C = -1A; V _{CE} = -5V | | 7 | | MHz |

◆ **h_{FE-1} Classifications**

| R | O |
|-------|--------|
| 40-80 | 70-140 |