

isc Silicon PNP Power Transistors

2SB558

DESCRIPTION

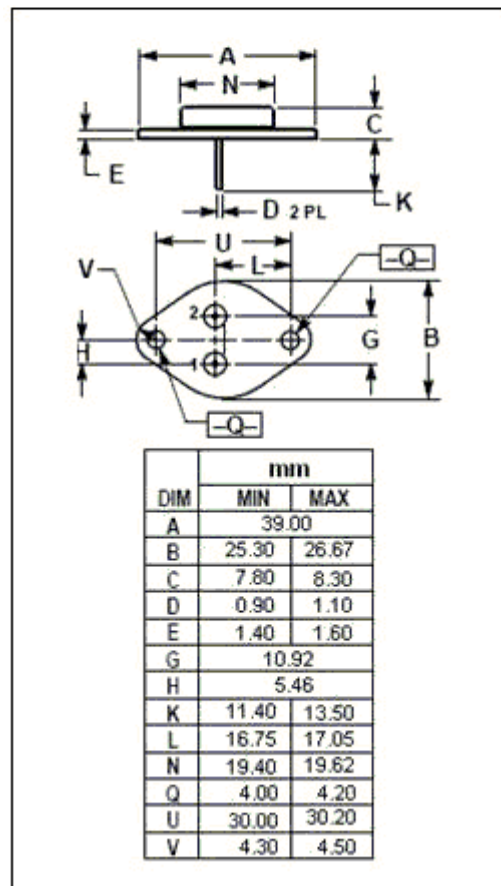
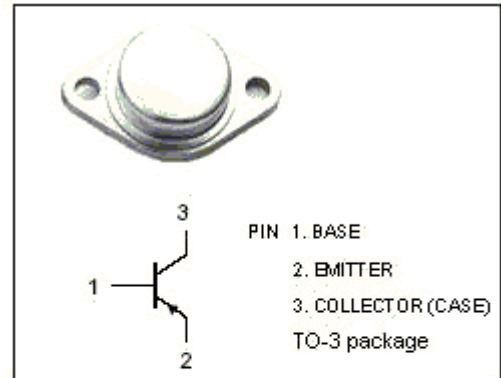
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min})$
- High Power Dissipation-
: $P_C = 60W(\text{Max}) @ T_C = 25^\circ C$
- Complement to Type 2SD428

APPLICATIONS

- Designed for power amplifier applications.
- Recommended for 40W high-fidelity audio frequency amplifier output stage.

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

| SYMBOL | PARAMETER | VALUE | UNIT |
|-----------|---|---------|------------|
| V_{CBO} | Collector-Base Voltage | -100 | V |
| V_{CEO} | Collector-Emitter Voltage | -100 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current-Continuous | -7 | A |
| I_E | Emitter Current-Continuous | 7 | A |
| P_C | Collector Power Dissipation @ $T_C = 25^\circ C$ | 60 | W |
| T_J | Junction Temperature | 150 | $^\circ C$ |
| T_{stg} | Storage Temperature | -65~150 | $^\circ C$ |



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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 = -0.1A; I _B = 0 | -100 | | | 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} = -50V; 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 | 15 | | | |
| C _{OB} | Output Capacitance | I _E = 0; V _{CB} = -10V; f= 1MHz | | 220 | | 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 |