

isc Silicon NPN Power Transistor

2SC1079

DESCRIPTION

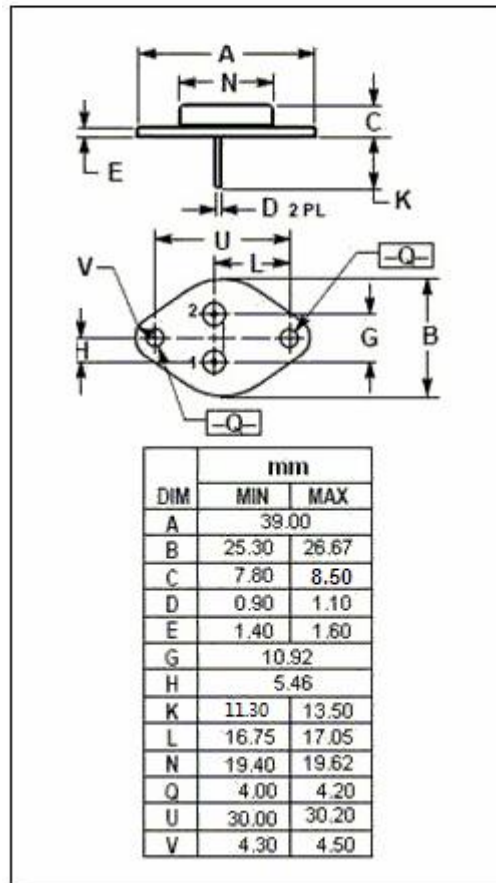
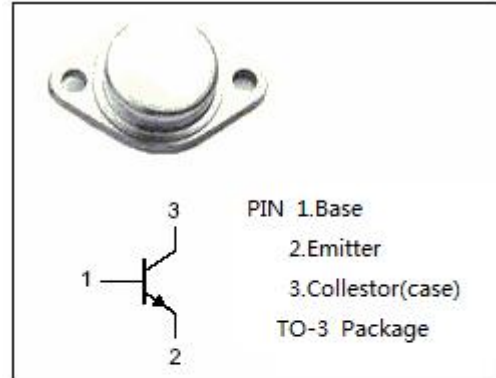
- With TO-3 Package
- High power dissipation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio power amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|------------------------------|---------|------|
| V _{CBO} | Collector-Base Voltage | 150 | V |
| V _{CEO} | Collector-Emitter Voltage | 150 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| I _C | Collector Current-Continuous | 12 | A |
| P _C | Collector Power Dissipation | 100 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -65~150 | °C |



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 10A; I _B = 1A | | | 3.0 | V |
| V _{BE(ON)} | Base-Emitter ON Voltage | I _C = 10A; V _{CE} = 5V | | | 2.5 | V |
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = 10mA; I _B = 0 | 150 | | | V |
| V _{(BR)EBO} | Emitter-Base Breakdown Voltage | I _E = 1mA; I _C = 0 | 5 | | | V |
| h _{FE-1} | DC Current Gain | I _C = 2.0A; V _{CE} = 5V | 40 | | 140 | |
| h _{FE-2} | DC Current Gain | I _C = 7.0A; V _{CE} = 5V | 15 | | | |
| f _T | Current-Gain—Bandwidth Product | I _C = 2A ; V _{CE} = 5V | | 4 | | MHz |

◆ h_{FE-1} Classifications

| R | Y |
|-------|--------|
| 40-80 | 70-140 |

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