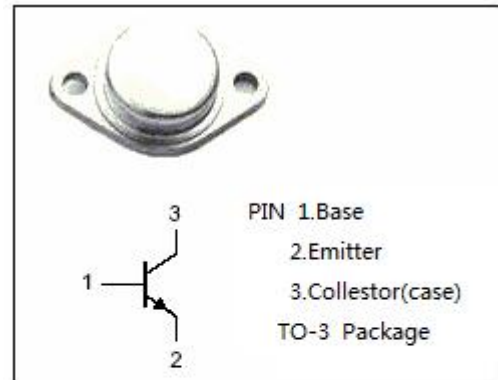


isc Silicon NPN Power Transistor
2SC1619
DESCRIPTION

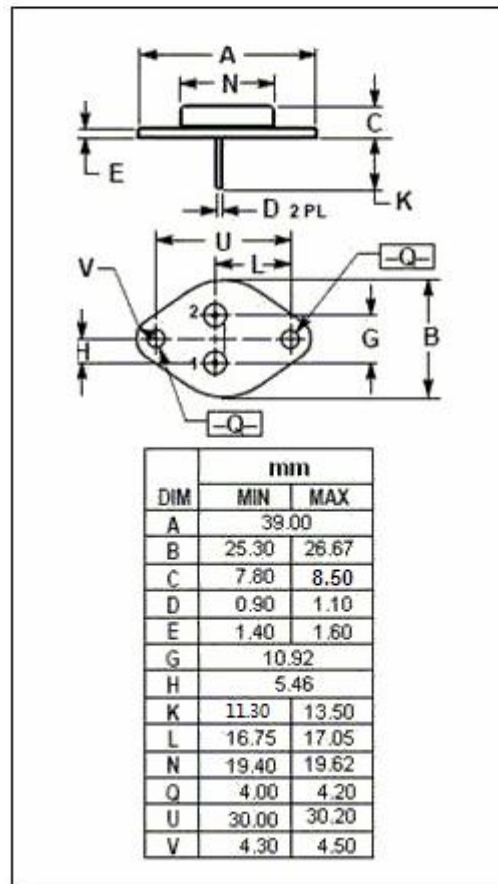
- High voltage
- Wide area of safe operation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for audio frequency output applications


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|------------------------------|---------|------|
| V _{CBO} | Collector-Base Voltage | 100 | V |
| V _{CEO} | Collector-Emitter Voltage | 80 | V |
| V _{EBO} | Emitter-Base Voltage | 6 | V |
| I _C | Collector Current-Continuous | 6 | A |
| P _C | Collector Power Dissipation | 50 | W |
| T _J | Junction Temperature | 150 | °C |
| T _{stg} | Storage Temperature Range | -55~150 | °C |


THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------------|--------------------------------------|-----|------|
| R _{th j-c} | Thermal Resistance, Junction to Case | 2.5 | °C/W |

isc Silicon NPN Power Transistor
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ELECTRICAL CHARACTERISTICS
 $T_c=25^{\circ}\text{C}$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|---------------|--------------------------------------|----------------------|-----|------|-----|------|
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C=4A; I_B=0.4A$ | | | 2.0 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C=4A; I_B=0.4A$ | | | 2.5 | V |
| $V_{(BR)CEO}$ | Collector-Emitter Breakdown Voltage | $I_C=25mA; I_B=0$ | 80 | | | V |
| $V_{(BR)EBO}$ | Emitter-Base Breakdown Voltage | $I_E=1mA; I_C=0$ | 6 | | | V |
| h_{FE} | DC Current Gain | $I_C=3A; V_{CE}=4V$ | 20 | | 180 | |
| I_{CBO} | Collector Cutoff Current | $V_{CB}=100V; I_E=0$ | | | 0.1 | mA |
| I_{EBO} | Emitter Cutoff Current | $V_{EB}=6V; I_C=0$ | | | 0.1 | mA |

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