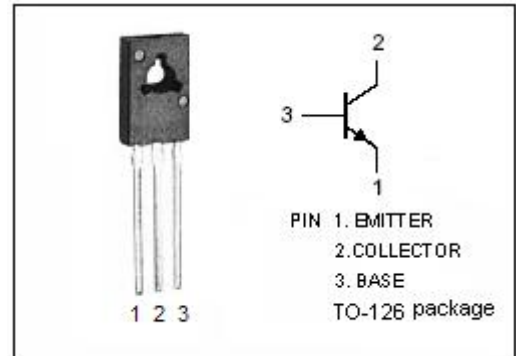


isc Silicon NPN Power Transistor
2SC2682
DESCRIPTION

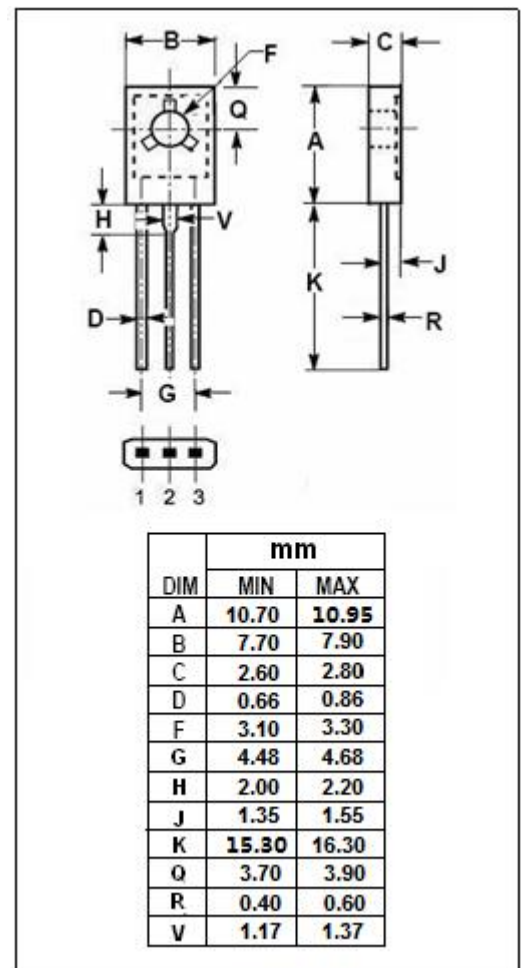
- High voltage
- Low Saturation Voltage
- Complementary to 2SA1142 PNP transistor
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- The 2SC2682 is designed for use in audio frequency power amplifier


ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|---------|------|
| V _{CBO} | Collector-Base Voltage | 180 | V |
| V _{CER} | Collector-Emitter Voltage R _{BE} =150 Ω | 180 | V |
| V _{CEO} | Collector-Emitter Voltage | 180 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| I _c | Collector Current-Continuous | 0.1 | A |
| P _c | Collector Power Dissipation @ T _c =25°C | 10 | W |
| T _J | Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature Range | -55~150 | °C |



isc Silicon NPN Power Transistor

2SC2682

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 =50mA; I _B = 5mA | | | 0.5 | V |
| V _{BE(sat)} | Base-Emitter Saturation Voltage | I _C =50mA; I _B = 5mA | | | 1.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 180V ; I _E = 0 | | | 1 | μ A |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 5V; I _C = 0 | | | 1 | μ A |
| h _{FE-1} | DC Current Gain | I _C = 1mA ; V _{CE} = 10V | 90 | | | |
| h _{FE-2} | DC Current Gain | I _C = 10mA ; V _{CE} = 10V | 100 | | 320 | |
| NF | Noise figure | I _C = 1mA ; V _{CE} = 10V; R _G =10KΩ, F=1KHz | 4 | | | dB |

◆ h_{FE-2} Classifications

| Q | P |
|---------|---------|
| 100-200 | 160-320 |

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