

isc Silicon NPN Power Transistor

2SC2706

DESCRIPTION

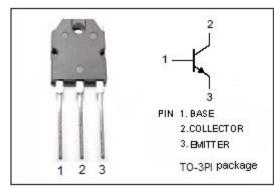
- · Collector-Emitter Breakdown Voltage-
 - : V_{(BR)CEO}= 140V(Min)
- Complement to Type 2SA1146
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

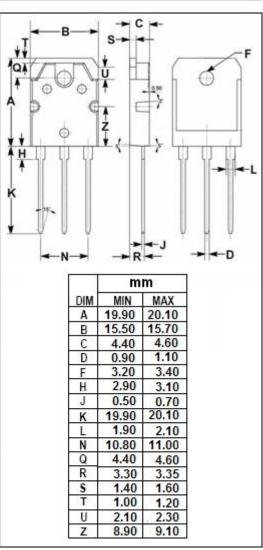
APPLICATIONS

- · Audio frequency low power amplifier applications
- Recommend for 70W audio frequency amplifier output stage applications



| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|--|-------|--------------|
| V _{CBO} | Collector-Base Voltage | 140 | V |
| V _{CEO} | Collector-Emitter Voltage | 140 | V |
| V _{EBO} | Emitter-Base Voltage | 5 | V |
| Ic | Collector Current-Continuous | 10 | А |
| I _B | Base Current-Continuous | 1 | А |
| Pc | Collector Power Dissipation @ T _C =25 ℃ | 100 | W |
| TJ | Junction Temperature 150 | | $^{\circ}$ C |
| T _{stg} | Storage Temperature Range -55~1 | | °C |







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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | MAX | UNIT |
|----------------------|--------------------------------------|---|-----|------|-----|------|
| V _{(BR)CEO} | Collector-Emitter Breakdown Voltage | I _C = 50mA; I _B = 0 | 140 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 5A; I _B = 0.5A | | | 2.0 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = 5A; V _{CE} = 5V | | | 2.5 | V |
| I _{CBO} | Collector Cutoff Current | V _{CB} = 140V; I _E =0 | | | 50 | μА |
| ІЕВО | Emitter Cutoff Current | V _{EB} = 5V; I _C =0 | | | 50 | μА |
| h _{FE-1} | DC Current Gain | I _C = 1A; V _{CE} = 5V | 55 | | 240 | |
| h _{FE-2} | DC Current Gain | I _C = 5A; V _{CE} = 5V | 30 | | | |
| Сов | Output Capacitance | I _E = 0; V _{CB} = 10V; f _{test} = 1.0MHz | | 130 | | pF |
| f _T | Current-Gain—Bandwidth Product | I _C = 1A; V _{CE} = 10V | 25 | | | MHz |

♦ h_{FE-1} Classifications

| R | 0 | Y |
|--------|--------|---------|
| 55-110 | 80-160 | 120-240 |

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