

INCHANGE SEMICONDUCTOR

isc Silicon NPN Power Transistor

ET190

DESCRIPTION

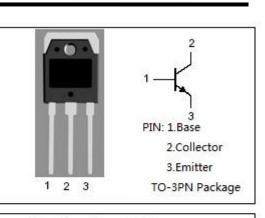
- · Low Collector Saturation Voltage-
 - : V_{CE(sat)}= 2.0V(Min) @I_C= 8A
- · High reliability
- High D.C current gain
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

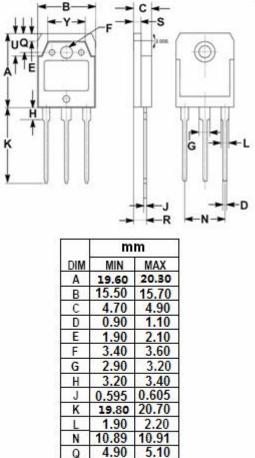
APPLICATIONS

· Power amplifier applications

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

| SYMBOL | PARAMETER | VALUE | UNIT | |
|------------------|------------------------------|---------|------|--|
| V _{CBO} | Collector-Base Voltage | 600 | v | |
| VCEO | Collector-Emitter Voltage | 600 | V | |
| V _{EBO} | Emitter-Base Voltage | 6 | V | |
| lc | Collector Current-Continuous | 8 | А | |
| lв | Base Current-Continuous | 1 | А | |
| Pc | Collector Power Dissipation | 80 | W | |
| TJ | Junction Temperature | 150 | °C | |
| T _{stg} | Storage Temperature Range | -55~150 | °C | |
| T _{stg} | Storage Temperature Range | -55~150 | °C | |





3.35

5.90

1.995

R

s

U

Y

3.45

2,100

6.20

9.90 | 10.10

isc website: www.iscsemi.com



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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | TYP. | МАХ | UNIT |
|------------------------|--------------------------------------|---|-----|------|-----|------|
| V(BR)CEO | Collector-Emitter Breakdown Voltage | I _C = 1mA ; I _B = 0 | 600 | | | V |
| V _{(BR)CBO} | Collector-Emitter Breakdown Voltage | I _C = 1mA ; I _B = 0 | 600 | | | V |
| V _{CBO} (SUS) | Collector-Emitter Breakdown Voltage | I _C = 100mA ; I _B = 0 | 450 | | | V |
| V _{EBO} | Emitter-Base Breakdown Voltage | I _{EBO} =200mA | 6 | | | V |
| V _{CE(sat)} | Collector-Emitter Saturation Voltage | I _C = 5A; I _B = 0.1A | | | 1.2 | V |
| V _{BE(on)} | Base-Emitter On Voltage | I _C = 5A ; I _B = 0.1A | | | 1.8 | V |
| Ісво | Collector Cutoff Current | V _{CB} = 600V ; I _E =0 | | | 1 | mA |
| I _{EBO} | Emitter Cutoff Current | V _{EB} = 6V; I _C =0 | | | 200 | mA |
| h _{FE-1} | DC Current Gain | I _C = 5A ; V _{CE} = 5V | 200 | | | |

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