# BCP195

## PNP Silicon Planar
## Medium Power Transistor

RoHS Compliant Product

### SOT-89

### Description

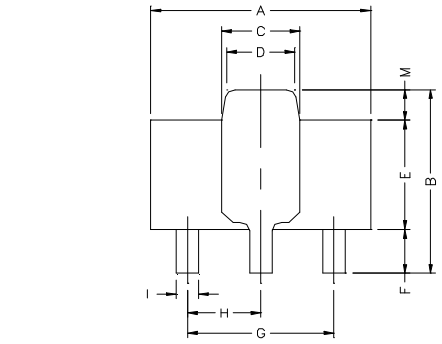


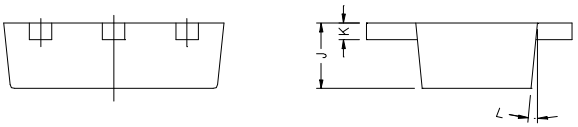
The BCP195 is designed for medium power amplifier applications.


1.BASE

2.COLLECTOR

3.EMITTER

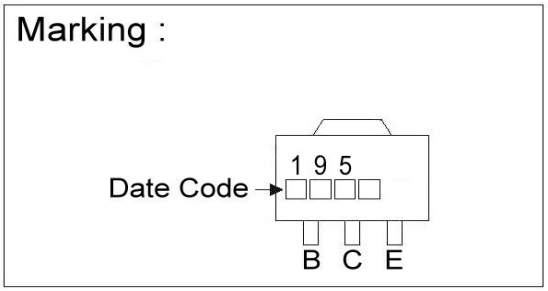



### Features

* 1Amp Continuous Current
* -60V VCEO
* Complementary TO BCP194

Marking :




| REF. | Millimeter | | REF. | Millimeter | |
|---|---|---|---|---|---|
| | Min. | Max. | | Min. | Max. |
| A | 4.4 | 4.6 | G | 3.00 REF. | |
| B | 4.05 | 4.25 | H | 1.50 REF. | |
| C | 1.50 | 1.70 | I | 0.40 | 0.52 |
| D | 1.30 | 1.50 | J | 1.40 | 1.60 |
| E | 2.40 | 2.60 | K | 0.35 | 0.41 |
| F | 0.89 | 1.20 | L | 5° TYP. | |
| | | | M | 0.70 REF. | |

### Absolute Maximum Ratings at Ta=25 °C

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Collector-Base Voltage | $V_{CBO}$ | -80 | V |
| Collector-Emitter Voltage | $V_{CEO}$ | -60 | V |
| Emitter-Base Voltage | $V_{EBO}$ | -5 | V |
| Collector Current (DC) | $I_C$ | -1 | A |
| Collector Current (Pulse) | $I_C$ | -2 | A |
| Base Current | $I_B$ | -200 | mA |
| Total Power Dissipation | $P_D$ | 1 | W |
| Operating Junction and Storage Temperature | $T_J$,$T_{STG}$ | +150,-55~ +150 | ℃ |

### Electrical Characteristics (Ta=25 °C, unless otherwise stated)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Conditions |
|---|---|---|---|---|---|---|
| Collector-Base Breakdown Voltage | $BV_{CBO}$ | -80 | - | - | V | $I_C$=-100μA, $I_E$=0 |
| Collector-Emitter Breakdown Voltage | $BV_{CEO}$ | -60 | - | - | V | $I_C$=-10mA, $I_B$=0 |
| Emitter-Base Breakdown Voltage | $BV_{EBO}$ | -5 | - | - | V | $I_E$=-100μA, $I_C$=0 |
| Collector Cut-off Current | $I_{CBO}$ | - | - | -100 | nA | $V_{CB}$=-60V, $I_E$=0 |
| Emitter Cut-off Current | $I_{EBO}$ | - | - | -100 | nA | $V_{EB}$=-4V, $I_C$=0 |
| Saturation Cut-off Current | $I_{CES}$ | - | - | -100 | nA | $V_{CES}$=-60V |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)1}$ | - | - | -0.3 | V | $I_C$=-500mA, $I_B$=-50mA |
| | $V_{CE(sat)2}$ | - | - | -0.6 | V | $I_C$=-1A, $I_B$ =-100mA |
| Output Capacitance | $C_{ob}$ | - | - | 10 | pF | $V_{CB}$=-10V, f=1MHz,$I_E$=0 |
| Base-Emitter Voltage | $V_{BE(sat)}$ | - | - | -1.2 | V | $I_C$=-1A, $I_B$=-100mA |
| | $V_{BE(on)}$ | - | - | -1 | V | $V_{CE}$=-5V,$I_B$=-1A |
| DC Current Gain | $h_{FE1}$ | 100 | - | - | | $V_{CE}$=-5V, $I_C$=-1mA |
| | $h_{FE2}$ | 100 | - | 300 | | $V_{CE}$=-5V, $I_C$=-500mA |
| | $h_{FE3}$ | 80 | - | - | | $V_{CE}$=-5V, $I_C$=-1A |
| | $h_{FE4}$ | 15 | - | - | | $V_{CE}$=-5V, $I_C$=-2A |
| Transition Frequency | $f_T$ | 150 | - | - | MHz | $V_{CE}$=-10V,$I_C$=-50mA, f=100MHz |

## Characteristics Curve