



## PNP General Purpose Amplifier

### Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture sensitivity level 1
- Low collector-emitter saturation voltage

### Mechanical Data

- **Package:** SOT-89  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:**

BC869

CEC

### ■Maximum Ratings (Ta=25 unless otherwise noted)

| Item                                        | Symbol          | Unit | Conditions                 | Value       |
|---------------------------------------------|-----------------|------|----------------------------|-------------|
| Minimum Collector-Emitter Voltage           | $V_{CEO}$       | V    | $I_C = -1mA, I_B = 0$      | -20         |
| Minimum Collector-Base Voltage              | $V_{CBO}$       | V    | $I_C = -100\mu A, I_E = 0$ | -32         |
| Minimum Emitter-Base Voltage                | $V_{EBO}$       | V    | $I_E = -100\mu A, I_C = 0$ | -5          |
| Collector Current                           | $I_C$           | A    |                            | -1          |
| Collector Power Dissipation                 | $P_C$           | mW   |                            | 500         |
| Thermal Resistance From Junction To Ambient | $R_{\theta JA}$ | /W   |                            | 250         |
| Operation Junction Temperature              | $T_j$           |      |                            | -55 to +150 |
| Storage Temperature                         | $T_{stg}$       |      |                            | -55 to +150 |



## BC869

### ■Electrical Characteristics (Ta=25 unless otherwise noted)

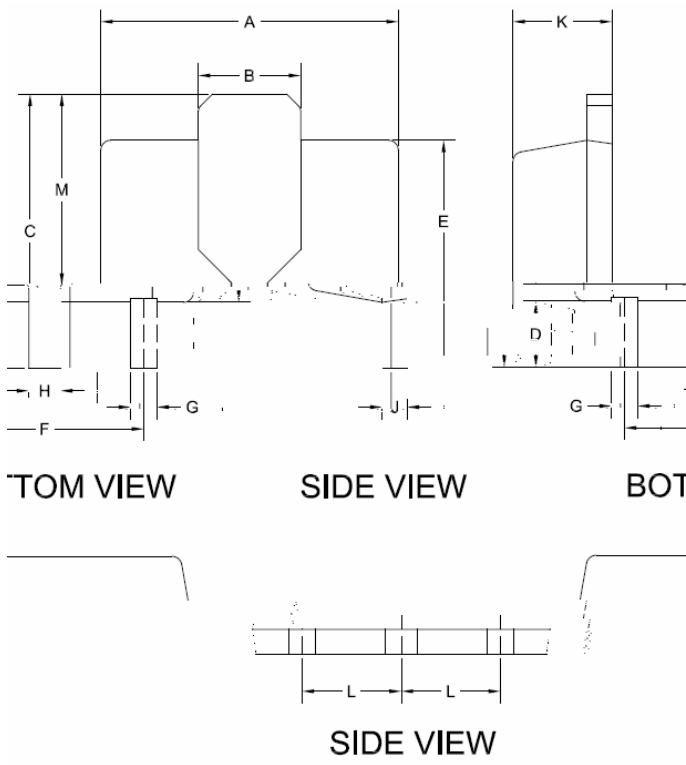
| Item                           | Symbol    | Unit | Conditions                   | Min | TYP | Max  |
|--------------------------------|-----------|------|------------------------------|-----|-----|------|
| Collector-Emitter Voltage      | $V_{CEO}$ | V    | $I_C = -1mA, I_B = 0$        | -20 |     |      |
| Collector-Base Voltage         | $V_{CBO}$ | V    | $I_C = -100\mu A, I_E = 0$   | -32 |     |      |
| Emitter-Base Voltage           | $V_{EBO}$ | V    | $I_E = -100\mu A, I_C = 0$   | -5  |     |      |
| Collector-Base cut-off current | $I_{CBO}$ | nA   | $V_{CB} = -25V$              |     |     | -100 |
| Emitter-Base cut-off current   | $I_{EBO}$ | nA   | $V_{EB} = -5V$               |     |     | -100 |
| DC Current Gain                | $h_{FE1}$ |      | $V_{CE} = -1V, I_C = -5mA$   | 50  |     |      |
|                                | $h_{FE2}$ |      | $V_{CE} = -1V, I_C = -500mA$ | 100 |     | 375  |

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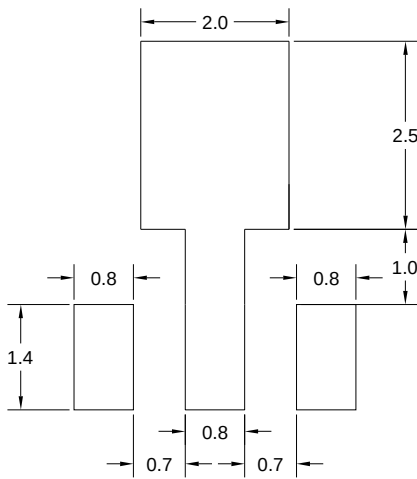




■SOT-89 Package Outline Dimensions



■SOT-89 Suggested Pad Layout



UNIT:MM



## Disclaimer

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