

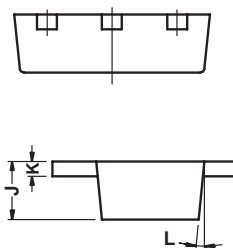
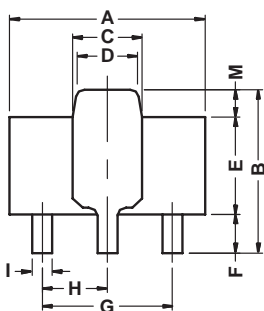
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

The BCP869 is designed for application required for high current (maximum -1 A) and low voltage (maximum -20 V).

PACKAGE DIMENSIONS

SOT-89



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|------|
| | Min. | Max. | | Min. | Max. |
| A | 4.40 | 4.60 | 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 | Ratings | Unit |
|--------------------------------|----------------|--------------|------|
| Collector-Base Voltage | V_{CBO} | -32 | V |
| Collector-Emitter Voltage | V_{CEO} | -20 | V |
| Emitter-Base Voltage | V_{EBO} | -5 | V |
| Collector Current -Continuous | I_C | -1 | A |
| Collector Dissipation | P_C | 0.5 | W |
| Junction & Storage temperature | T_J, T_{STG} | 150, -55~150 | °C |

PNP ELECTRICAL CHARACTERISTICS at Ta = 25°C

| Parameter | Symbol | Min. | Max. | Unit | Test Conditions |
|--------------------------------------|---------------|------|------|---------|---|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | -32 | - | V | $I_C = -0.1mA, I_E = 0$ |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | -20 | - | V | $I_C = -1mA, I_B = 0$ |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | -5 | - | V | $I_E = -0.1mA, I_C = 0$ |
| Collector cut-off current | I_{CBO} | - | -0.1 | μA | $V_{CB} = -25V, I_E = 0$ |
| Emitter cut-off current | I_{EBO} | - | -0.1 | μA | $V_{EB} = -5V, I_C = 0$ |
| DC current gain | $h_{FE(1)}$ | 50 | - | - | $V_{CE} = -10V, I_C = -5mA$ |
| | $h_{FE(2)}$ | 100 | 375 | - | $V_{CE} = -1V, I_C = -500mA$ |
| | $h_{FE(3)}$ | 60 | - | - | $V_{CE} = -1V, I_C = -1A$ |
| Base-emitter voltage | V_{BE} | - | -1 | V | $V_{CE} = -1V, I_C = -1A$ |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | - | -0.5 | V | $I_C = -1A, I_B = -100mA$ |
| Transition frequency | f_T | 40 | - | MHz | $V_{CE} = -5V, I_C = -10mA, f = 100MHz$ |

CLASSIFICATION OF hFE2

| Rank | BC869 | BC869-16 | BC869-25 |
|---------|-----------|-----------|-----------|
| Range | 100 – 375 | 100 – 250 | 160 – 375 |
| Marking | CEC | CGC | CHC |

CHARACTERISTIC CURVES

