



Micro Commercial Components



Micro Commercial Components
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BC869

BC869-16

BC869-25

Features

- High current (max. 1.0A)
- Low voltage (max. 20V)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

| Symbol | Rating | Value | Unit |
|-----------|---|-------------|------------------|
| V_{CEO} | Collector-Emitter Voltage | 20 | V |
| V_{CBO} | Collector-Base Voltage | 32 | V |
| V_{EBO} | Emitter-Base Voltage | 5.0 | V |
| I_C | Collector Current, DC | 1.0 | A |
| I_{BM} | Peak Base Current | 200 | mA |
| P_C | Collector Power Dissipation $T_{amb} \leq 25^\circ\text{C}$ | 0.50 | W |
| T_J | Junction Temperature | -55 to +150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | -55 to +150 | $^\circ\text{C}$ |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Typ | Max | Units |
|--------|-----------|-----|-----|-----|-------|
|--------|-----------|-----|-----|-----|-------|

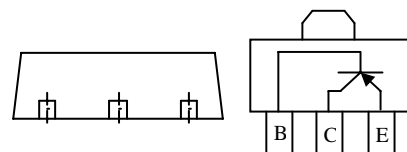
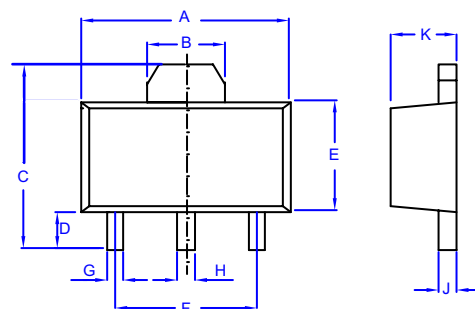
OFF CHARACTERISTICS

| | | | | | |
|---------------|--|-----------------|-----|------------|--------------|
| I_{CBO} | Collector Cutoff Current ($V_{CB}=25\text{Vdc}$) ($V_{CB}=25\text{Vdc}$, $I_E=0$, $T_J=150^\circ\text{C}$) | --- | --- | 100 10 | nAdc uAdc |
| I_{EBO} | Emitter Cutoff Current ($V_{EB}=5.0\text{Vdc}$, $I_C=0$) | --- | --- | 100 | nAdc |
| h_{FE} | DC Current Gain ($V_{CE}=10\text{Vdc}$, $I_C=5.0\text{mA}$) ($V_{CE}=1.0\text{Vdc}$, $I_C=500\text{mA}$) ($V_{CE}=1.0\text{Vdc}$, $I_C=1.0\text{A}$) | 50 100 60 | --- | --- | --- |
| | DC Current Gain ($V_{CE}=1.0\text{Vdc}$, $I_C=500\text{mA}$) BC869-16 BC869-25 | 100 160 | --- | 250 375 | --- |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage ($I_C=1.0\text{A}$, $I_E=100\text{mA}$) | --- | --- | 500 | mVdc |
| f_T | Transition Frequency ($V_{CE}=5.0\text{Vdc}$, $I_C=10\text{mA}$, $f=100\text{MHz}$) | 40 | --- | --- | MHz |

DEVICE MARKING BC869=CEC BC869-16=CGC BC869-25=CHC

PNP Medium Power Transistors

SOT-89



| DIM | INCHES | | MM | | NOTES |
|-----|--------|-------|------|-------|-------|
| | MIN | MAX | MIN | MAX | |
| A | .173 | .181 | 4.39 | 4.60 | |
| B | .061 | ----- | 1.55 | ----- | REF. |
| C | .154 | .165 | 3.91 | 4.25 | |
| D | .031 | .039 | 0.80 | 1.00 | |
| E | .092 | .100 | 2.34 | 2.54 | |
| F | .118 | ----- | 3.00 | ----- | TYP |
| G | .013 | .019 | 0.33 | 0.48 | |
| H | .015 | .021 | 0.38 | 0.53 | |
| J | .015 | .016 | 0.38 | 0.41 | |
| K | .055 | .063 | 1.40 | 1.60 | |

Ordering Information :

| Device | Packing |
|----------------|----------------------------|
| Part Number-TP | Tape & Reel; 1 Kpcs / Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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