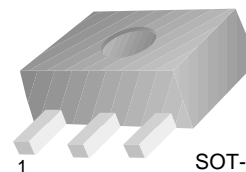


FJC690

Camera Strobe Flash Application

- Complement to FJC790
- High Collector Current
- Low Collector-Emitter Saturation Voltage



SOT-89
Marking: F69
1. Base 2. Collector 3. Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

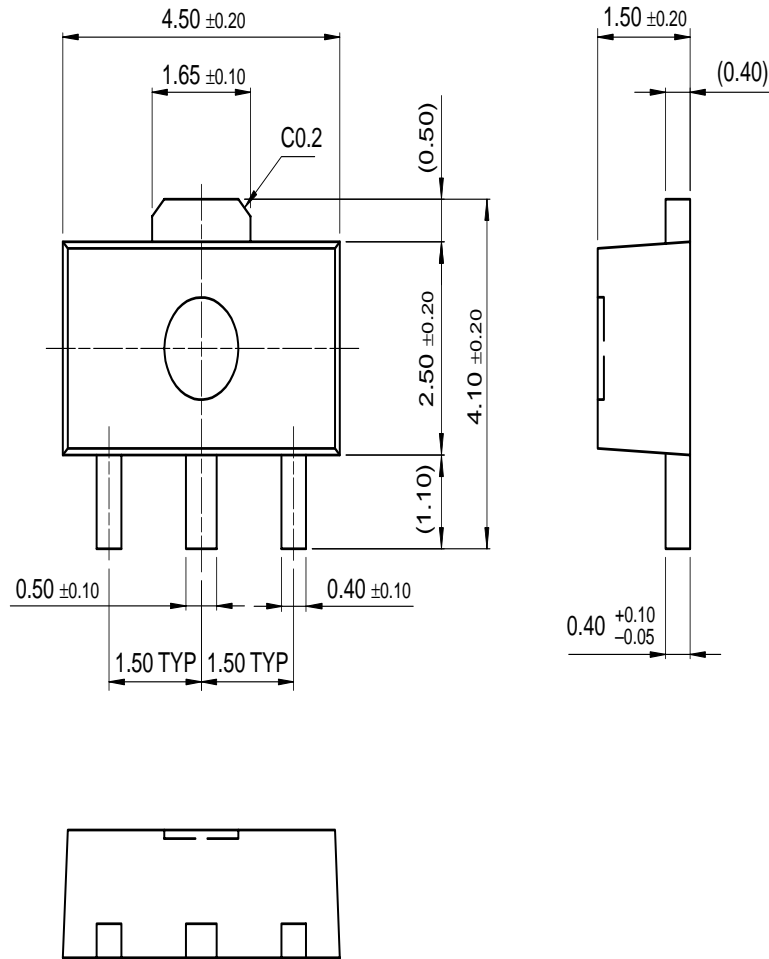
| Symbol | Parameter | Value | Units |
|-----------|---------------------------|------------|------------------|
| V_{CBO} | Collector-Base Voltage | 45 | V |
| V_{CEO} | Collector-Emitter Voltage | 45 | V |
| V_{EBO} | Emitter-Base Voltage | 5 | V |
| I_C | Collector Current (DC) | 2 | A |
| P_C | Power Dissipation | 0.5 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | - 55 ~ 150 | $^\circ\text{C}$ |

Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

| Symbol | Parameter | Test Condition | Min. | Typ. | Max. | Units |
|---------------|--------------------------------------|--|-------------------|------|-----------|---------------|
| BV_{CBO} | Collector-Base Breakdown Voltage | $I_C = 100\mu\text{A}, I_E = 0$ | 45 | | | V |
| BV_{CEO} | Collector-Emitter Breakdown Voltage | $I_C = 10\text{mA}, I_B = 0$ | 45 | | | V |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E = 100\mu\text{A}, I_C = 0$ | 5 | | | V |
| I_{CEO} | Collector Cut-off Current | $V_{CE} = 35\text{V}, V_B = 0$ | | | 0.1 | μA |
| I_{EBO} | Emitter Cut-off Current | $V_{EB} = 4\text{V}, I_C = 0$ | | | 0.1 | μA |
| h_{FE} | DC Current Gain | $V_{CE} = 2\text{V}, I_C = 100\text{mA}$ $V_{CE} = 2\text{V}, I_C = 1\text{mA}$ $V_{CE} = 2\text{V}, I_C = 2\text{mA}$ | 500 400 150 | | | |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = 0.1\text{A}, I_B = 0.5\text{mA}$ $I_C = 1\text{A}, I_B = 5\text{mA}$ | | | 80 300 | mV mV |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C = 1\text{A}, I_B = 10\text{mA}$ | | | 0.9 | V |
| $V_{BE(on)}$ | Base-Emitter On Voltage | $V_{CE} = 2\text{V}, I_C = 1\text{A}$ | | | 0.85 | V |
| C_{OB} | Collector Output Capacitance | $V_{CB} = 10\text{V}, I_E = 0,$ $f = 1\text{MHz}$ | | 20 | | pF |

Package Dimensions

SOT-89



Dimensions in Millimeters

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| | | | | |
|--|---------------------------------|--------------------------------|---------------------------------|-----------------------------|
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