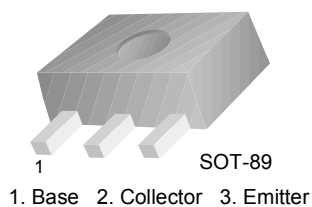


FJC1308

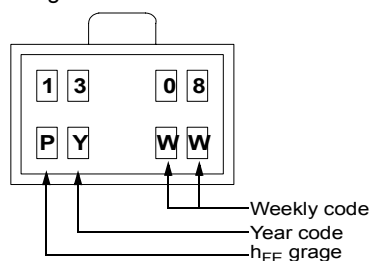
PNP Epitaxial Silicon Transistor

Audio Power Amplifier Applications

- Complement to FJC1963
- High Collector Current
- Low Collector-Emitter Saturation Voltage



Marking



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

| Symbol | Parameter | Value | Units |
|-----------|---|------------|------------------|
| V_{CBO} | Collector-Base Voltage | -30 | V |
| V_{CEO} | Collector-Emitter Voltage | -30 | V |
| V_{EBO} | Emitter-Base Voltage | -6 | V |
| I_C | Collector Current (DC) | -3 | A |
| P_C | Power Dissipation($T_C=25^\circ\text{C}$) | 0.5 | W |
| T_J | Junction Temperature | 150 | $^\circ\text{C}$ |
| T_{STG} | Storage Temperature | - 55 ~ 150 | $^\circ\text{C}$ |

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

| Symbol | Parameter | Test Condition | Min. | Max. | Units |
|---------------|--------------------------------------|---|------|-------|---------------|
| BV_{CBO} | Collector-Base Breakdown Voltage | $I_C = -50\mu\text{A}, I_E = 0$ | -30 | | V |
| BV_{CEO} | Collector-Emitter Breakdown Voltage | $I_C = -1\text{mA}, I_B = 0$ | -30 | | V |
| BV_{EBO} | Emitter-Base Breakdown Voltage | $I_E = -50\mu\text{A}, I_C = 0$ | -6 | | V |
| I_{CEO} | Collector Cut-off Current | $V_{CE} = -20\text{V}, V_B = 0$ | | -0.5 | μA |
| I_{EBO} | Emitter Cut-off Current | $V_{EB} = -5\text{V}, I_C = 0$ | | -0.5 | μA |
| h_{FE} | DC Current Gain | $V_{CE} = -2\text{V}, I_C = -0.5\text{A}$ | 80 | 390 | |
| $V_{CE(sat)}$ | Collector-Emitter Saturation Voltage | $I_C = -1.5, I_B = -0.15\text{A}$ | | -0.45 | V |
| $V_{BE(sat)}$ | Base-Emitter Saturation Voltage | $I_C = -1.5, I_B = -0.15\text{A}$ | | -1.5 | V |

h_{FE} Classification

| Classification | P | Q | R |
|-----------------|----------|-----------|-----------|
| h _{FE} | 80 ~ 180 | 120 ~ 270 | 180 ~ 390 |

Package Marking and Ordering Information

| Device Marking | Device | Package | Reel Size | Tape Width | Quantity |
|----------------|---------|---------|-----------|------------|----------|
| 1308 | FJC1308 | SOT-89 | 13" | -- | 4,000 |

Typical Performance Characteristics

Figure 1. Static Characteristic

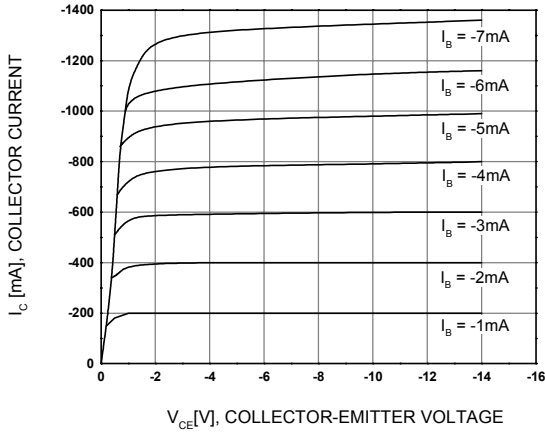


Figure 2. DC Current Gain

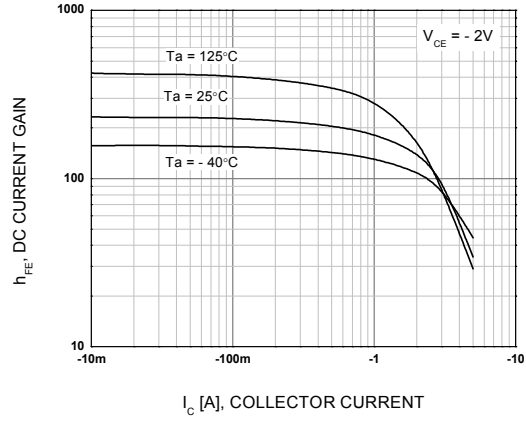


Figure 3. Collector-Emitter Saturation Voltage

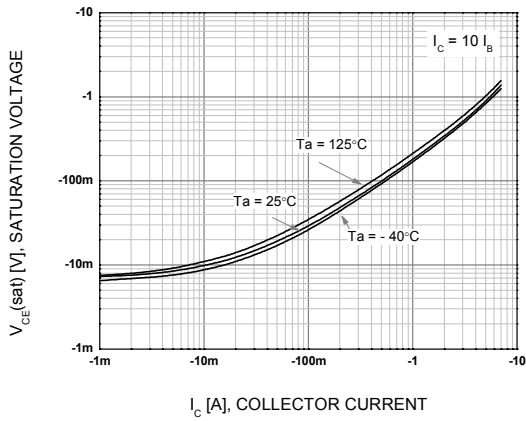


Figure 4. Base-Emitter Saturation Voltage

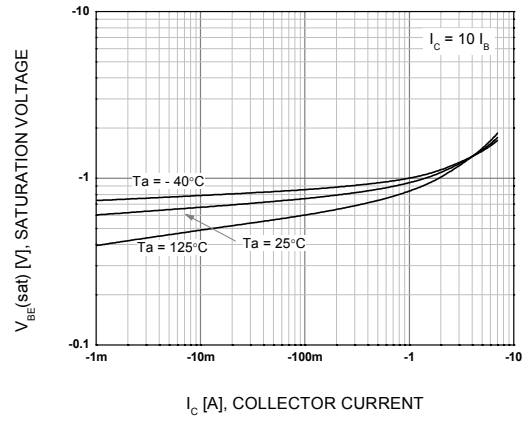


Figure 5. Base-Emitter On Voltage

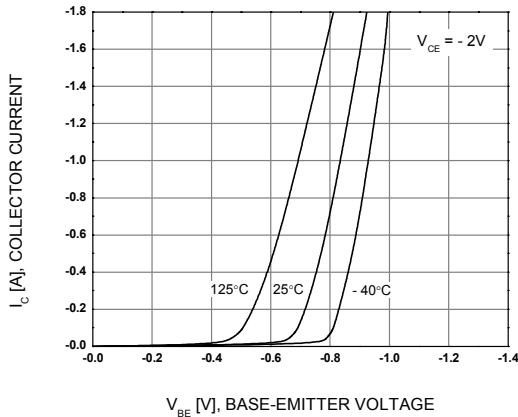
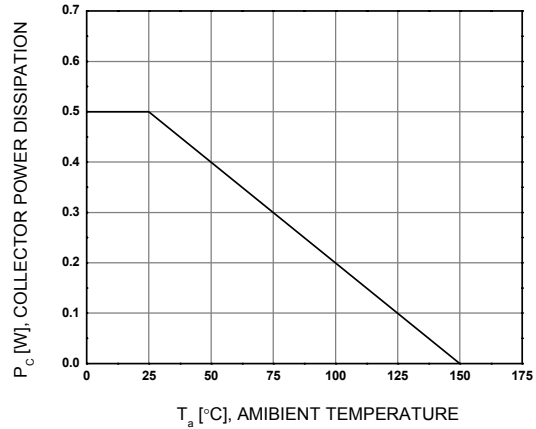
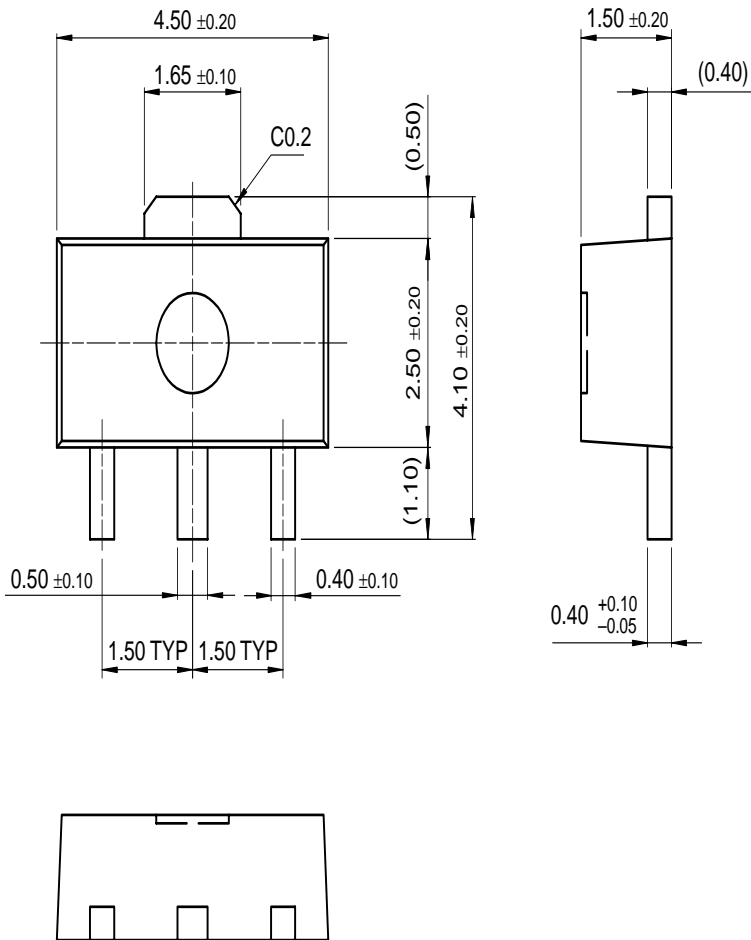


Figure 6. Power Derating



Mechanical Dimensions

SOT-89



Dimensions in Millimeters

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| ActiveArray™ | FASTR™ | LittleFET™ | PowerTrench® | SyncFET™ |
| Bottomless™ | FPS™ | MICROCOUPLER™ | QFET® | TinyLogic® |
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| CoolFET™ | GlobalOptoisolator™ | MicroPak™ | QT Optoelectronics™ | TruTranslation™ |
| CROSSVOLT™ | GTO™ | MICROWIRE™ | Quiet Series™ | UHC™ |
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| E ² CMOS™ | i-Lo™ | OCX™ | μSerDes™ | VCX™ |
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