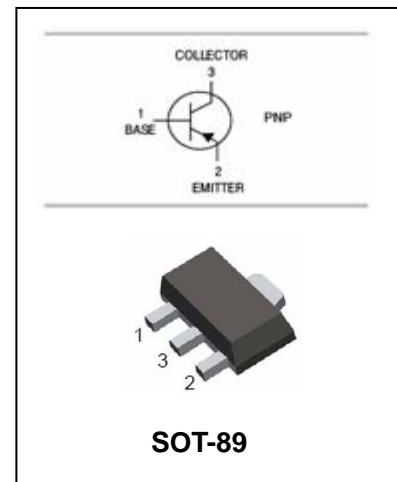


Silicon Planar Epitaxial Transistor

2SA1204

FEATURES

- Suitable for output stage of 1 watts Amplifier
- Suitable flat package
- High DC current gain
- $P_C=1.0$ to $2.0W$ (mounted on ceramic substrate)
- Complementary to 2SC2884



ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| 2SA1204 | RO/RV | SOT-89 |

MAXIMUM RATING @ $T_a=25^{\circ}C$ unless otherwise specified

| Symbol | Parameter | Value | Units |
|----------------|----------------------------------|--------------------|-------------|
| V_{CBO} | Collector-Base Voltage | -35 | V |
| V_{CEO} | Collector-Emitter Voltage | -30 | V |
| V_{EBO} | Emitter-Base Voltage | -5 | V |
| I_C | Collector Current | -800 | mA |
| I_B | Base Current | -160 | mA |
| P_C | Collector Dissipation | 500 1000(Note1) | mW |
| T_j, T_{stg} | Junction and Storage Temperature | -55 to +150 | $^{\circ}C$ |

Note1: Mounted on ceramic substrate($250mm^2 \times 0.8t$)



Silicon Planar Epitaxial Transistor

2SA1204

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|-----------|-----|------|---------|
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-10mA, I_B=0$ | -30 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-35V, I_E=0$ | | | -0.1 | μA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-5V, I_C=0$ | | | -0.1 | μA |
| DC current gain | h_{FE} | $V_{CE}=-1V, I_C=-100mA$ $V_{CE}=-1V, I_C=-700mA$ | 100 35 | | 320 | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-500mA, I_B=-20mA$ | | | -0.7 | V |
| Base-emitter | V_{BE} | $V_{CE}=-1V, I_C=-10mA$ | -0.5 | | -0.8 | V |
| Transition frequency | f_T | $V_{CE}=-5V, I_C=-10mA$ | | 120 | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-10V, I_E=0, f=1MHz$ | | 19 | | pF |

CLASSIFICATION OF h_{FE}

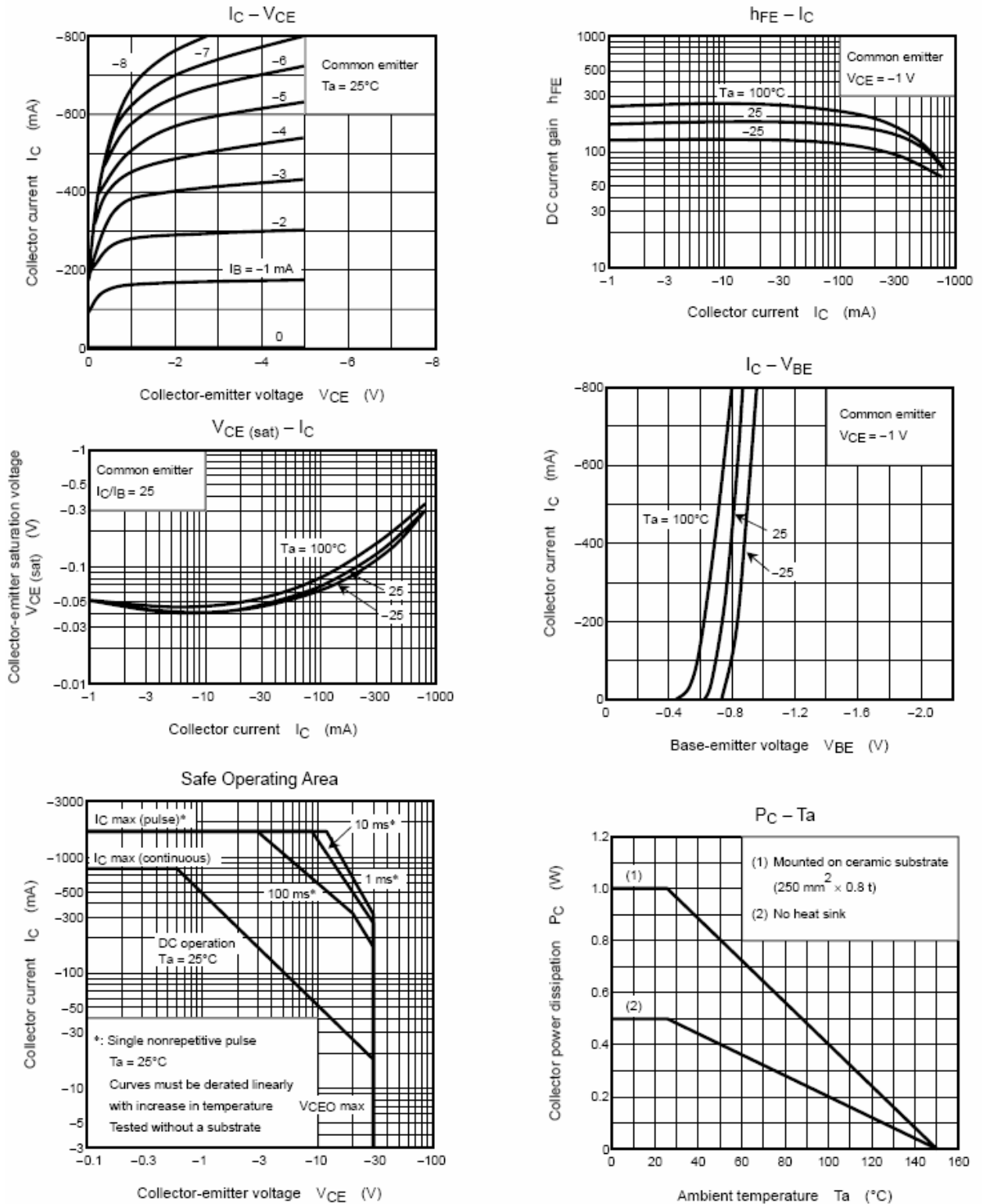
| | | |
|---------|---------|---------|
| Rank | O | Y |
| Range | 100-200 | 160-320 |
| Marking | RO | RY |



Silicon Planar Epitaxial Transistor

2SA1204

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





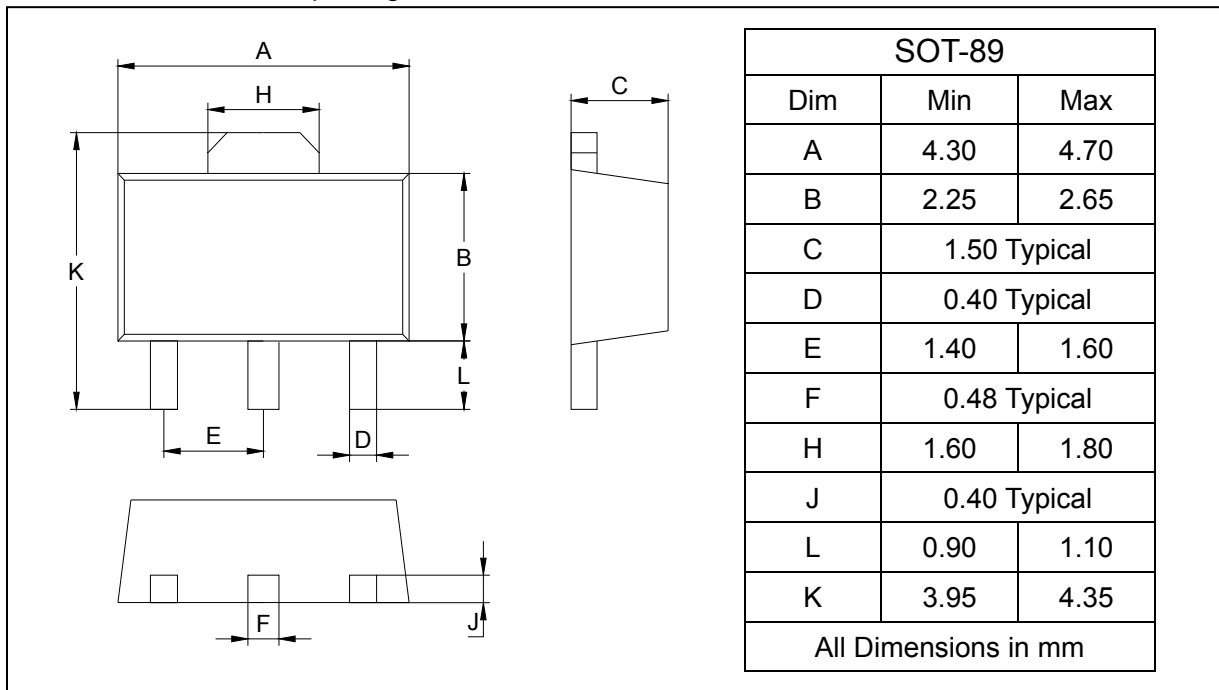
Silicon Planar Epitaxial Transistor

2SA1204

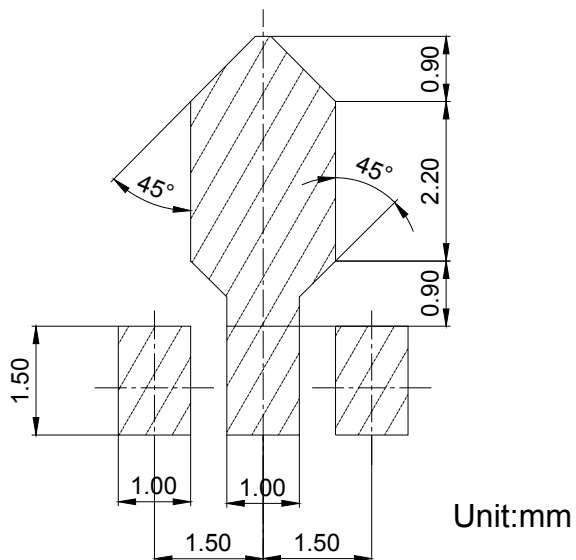
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|---------|---------|----------------|
| 2SA1204 | SOT-89 | 1000/Tape&Reel |