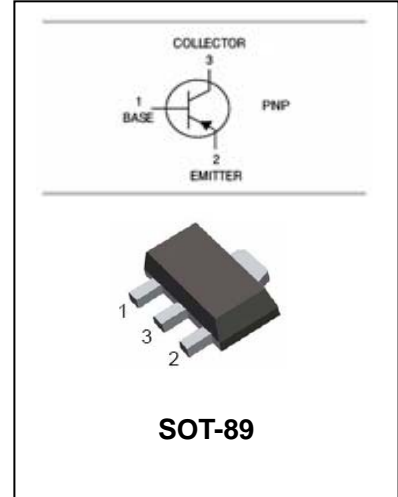


PNP Silicon Planar Medium Power High Performance Transistor FCX591

FEATURES

- Complementary type: FCX491.



ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| FCX591 | P1 | SOT-89 |

MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Symbol | Parameter | Value | Units |
|-----------------------------------|----------------------------------|---------|-------|
| V _{CBO} | Collector-Base Voltage | -80 | V |
| V _{CEO} | Collector-Emitter Voltage | -60 | V |
| V _{EBO} | Emitter-Base Voltage | -5 | V |
| I _{CM} | Peak Pulse Current | -2 | A |
| I _C | Collector Current -Continuous | -1 | A |
| I _B | Base Current | -0.2 | A |
| P _D | Power Dissipation | 1 | W |
| T _j , T _{stg} | Junction and Storage Temperature | -65~150 | °C |

PNP Silicon Planar Medium Power High Performance Transistor
FCX591

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

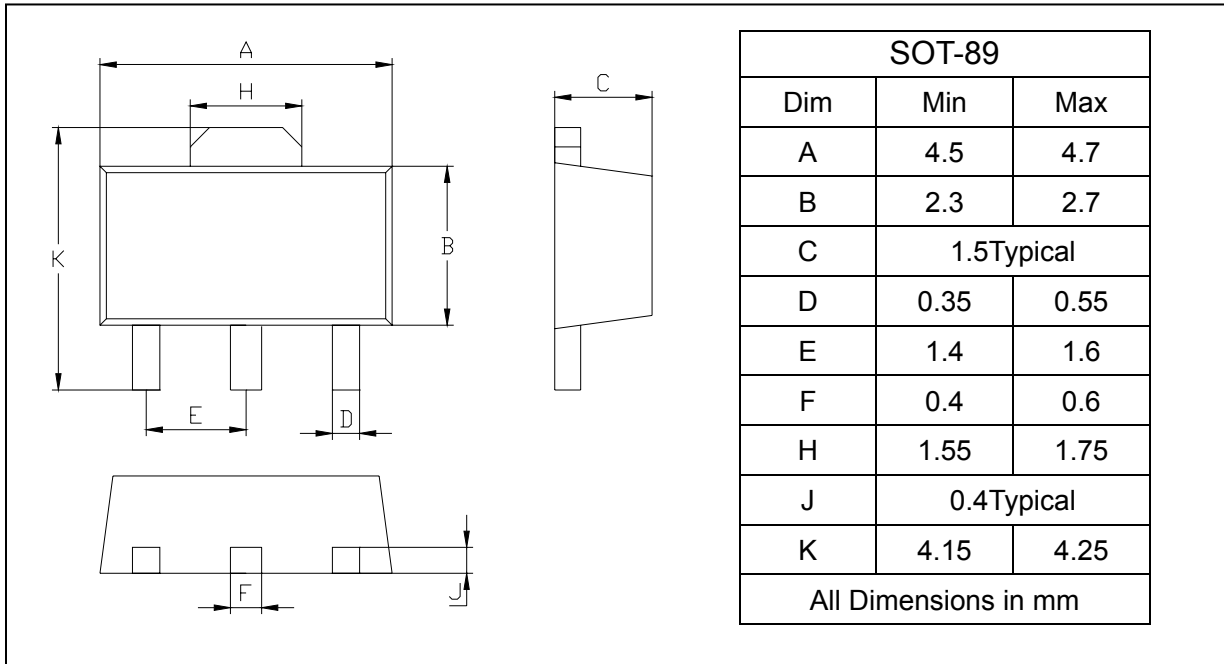
| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|--------------------------------------|---------------|--|------------------------|-----|--------------|------|
| Collector-base breakdown voltage | $V_{(BR)CBO}$ | $I_C=-100\mu A, I_E=0$ | -80 | | | V |
| Collector-emitter breakdown voltage | $V_{(BR)CEO}$ | $I_C=-10mA, I_B=0$ | -60 | | | V |
| Emitter-base breakdown voltage | $V_{(BR)EBO}$ | $I_E=-100\mu A, I_C=0$ | -5 | | | V |
| Collector cut-off current | I_{CBO} | $V_{CB}=-60V$ | | | -100 | nA |
| Collector-Emitter Cut-Off Current | I_{CES} | $V_{CES}=-60V$ | | | -100 | nA |
| Emitter cut-off current | I_{EBO} | $V_{EB}=-3V, I_C=0$ | | | -100 | nA |
| DC current gain | h_{FE} | $V_{CE}=-5V, I_C=-1mA$ $V_{CE}=-5V, I_C=-500mA$ $V_{CE}=-5V, I_C=-1A$ $V_{CE}=-5V, I_C=-2A$ | 100 100 80 15 | 300 | | |
| Collector-emitter saturation voltage | $V_{CE(sat)}$ | $I_C=-500mA, I_B=-50mA$ $I_C=-1A, I_B=-100mA$ | | | -0.3 -0.6 | V |
| Base-emitter saturation voltage | $V_{BE(sat)}$ | $I_C=-1A, I_B=-100mA$ | | | -1.2 | V |
| Base-emitter Turn-on Voltage | $V_{BE(on)}$ | $I_C=-1A, V_{CE}=-5V$ | | | -1.0 | V |
| Transition frequency | f_T | $V_{CE}=-10V, I_C=-50mA,$ $f=100MHz$ | 150 | | | MHz |
| Collector output capacitance | C_{ob} | $V_{CB}=-10V, I_E=0, f=1MHz$ | | | 10 | pF |

PNP Silicon Planar Medium Power High Performance Transistor FCX591

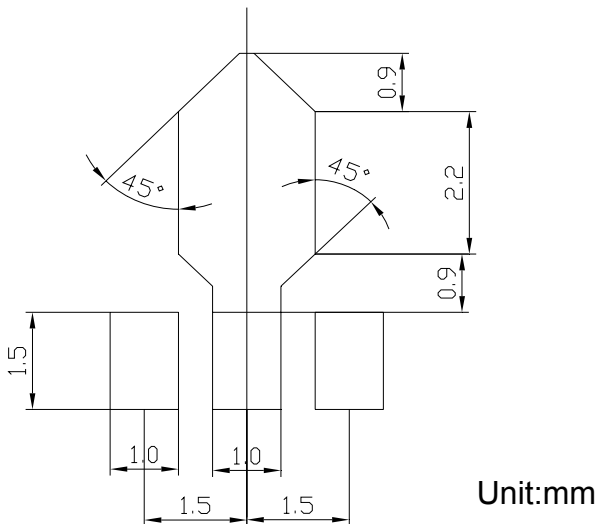
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

| Device | Package | Shipping |
|--------|---------|----------------|
| FCX591 | SOT-89 | 1000/Tape&Reel |