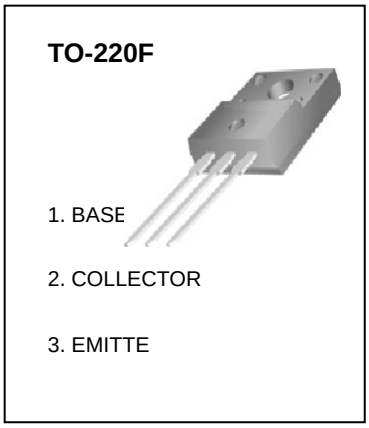
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

# TO-220F Plastic-Encapsulate Transistors

## 3CA1837 TRANSISTOR (PNP)




**FEATURES**

- **High Transition Frequency : $f_T$=70MH$_Z$(Typ)**
- **Complementary to 3DA4793**
- **Collector Power Dissipation**

  **$P_{CM}$ : 2W (Tamb=25℃)**

  **20 W (Tcase=25℃)**

**MAXIMUM RATINGS* $T_A$=25℃ unless otherwise noted**

| Symbol | Parameter | Value | Units |
|---|---|---|---|
| $V_{CBO}$ | Collector-Base Voltage | -230 | V |
| $V_{CEO}$ | Collector-Emitter Voltage | -230 | V |
| $V_{EBO}$ | Emitter-Base Voltage | -5 | V |
| $I_C$ | Collector Current -Continuous | -1000 | mA |
| $I_B$ | Base Current | -100 | mA |
| $T_J$ | Junction Junction | 150 | ℃ |
| $T_{stg}$ | Storage Junction | -55-150 | ℃ |

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)**

| Parameter | Symbol | Test conditions | MIN | TYP | MAX | UNIT |
|---|---|---|---|---|---|---|
| **Collector-base breakdown voltage** | $V_{(BR)CBO}$ | Ic=-100μA , $I_E$=0 | -230 | | | V |
| **Collector-emitter breakdown voltage** | $V_{(BR)CEO}$ | Ic=-1mA, $I_B$=0 | -230 | | | V |
| **Emitter-base breakdown voltage** | $V_{(BR)EBO}$ | $I_E$=-100μA, $I_C$=0 | -5 | | | V |
| **Collector cut-off current** | $I_{CBO}$ | $V_{CB}$=-230V, $I_E$=0 | | | -10 | μA |
| **Emitter cut-off current** | $I_{EBO}$ | $V_{EB}$=-5V, $I_C$=0 | | | -10 | μA |
| **DC current gain** | $h_{FE}$ | $V_{CE}$=-5V, $I_C$=-100mA | 100 | | 320 | |
| **Collector-emitter saturation voltage** | $V_{CE(sat)}$ | $I_C$=-500mA, $I_B$=-50mA | | | -1.5 | V |
| **Transition frequency** | $f_T$ | $V_{CE}$=-10V, $I_C$=-100mA | 30 | | | MHz |

## Typical Characteristics

3CA1837