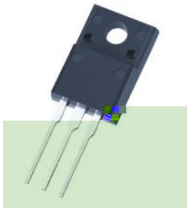


TO-220F          NPN          Silicon NPN transistor in a TO-220F Plastic Package.

Complementary pair with 3CA1837.  
High  $f_T$ , complementary pair with 3CA1837.

General power and driver stage amplifier applications.



PIN1 Base          PIN 2 Collector          PIN 3 Emitter

**h<sub>FE</sub> Av<sub>Q</sub> A<sub>β</sub>™**

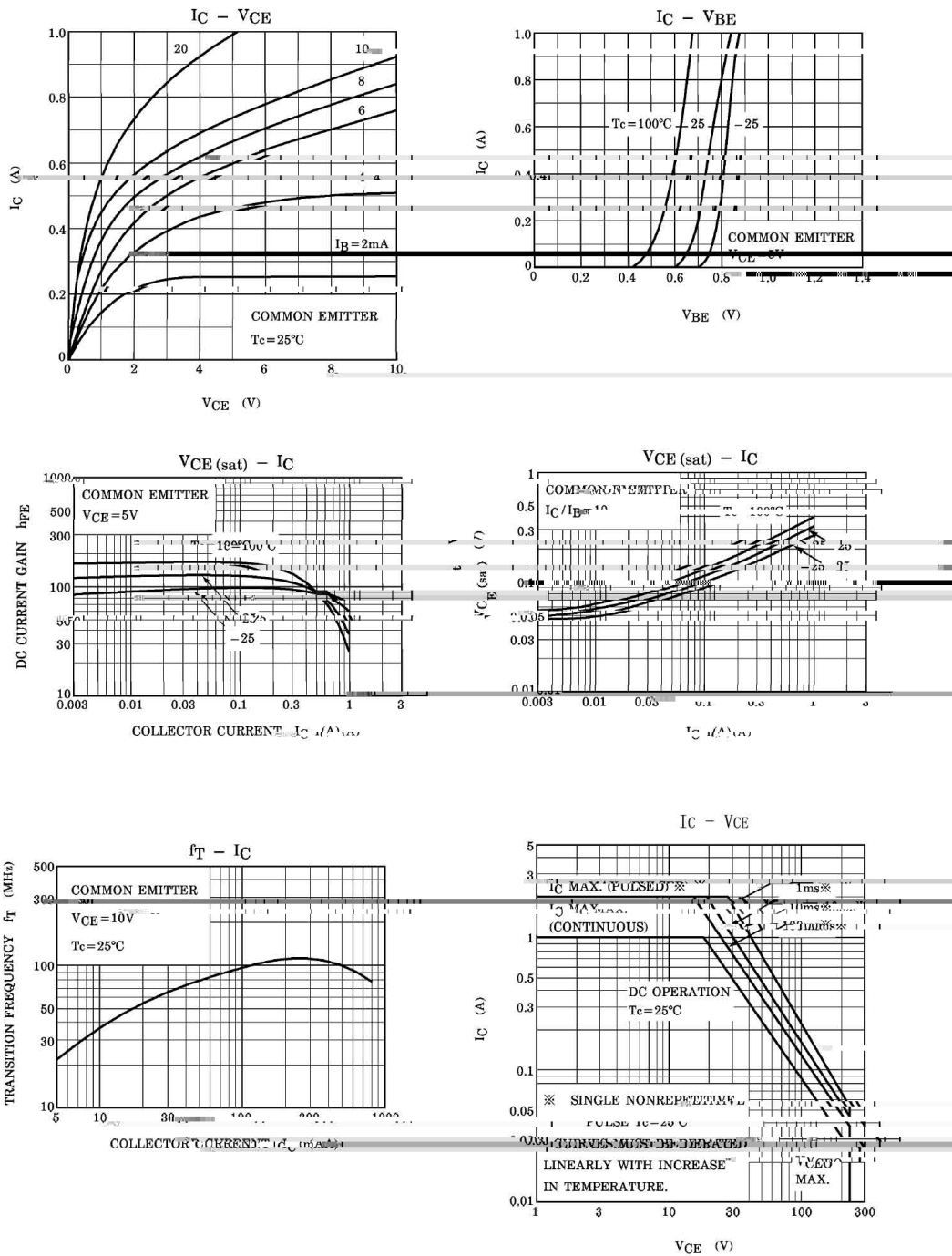
**/ Absolute Maximum Ratings(Ta=25 )**

| Parameter                      | Symbol         | Rating  | Unit |
|--------------------------------|----------------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$      | 230     | V    |
| Collector to Emitter Voltage   | $V_{CEO}$      | 230     | V    |
| Emitter to Base Voltage        | $V_{EBO}$      | 5.0     | V    |
| Collector Current - Continuous | $I_C$          | 1.0     | A    |
| Base Current - Continuous      | $I_B$          | 0.1     | A    |
| Collector Power Dissipation    | $P_C$          | 2.0     | W    |
|                                | $P_{C(Tc=25)}$ | 20      | W    |
| Junction Temperature           | $T_j$          | 150     |      |
| Storage Temperature Range      | $T_{stg}$      | -55 150 |      |

**/ Electrical Characteristics(Ta=25 )**

| Parameter                               | Symbol        | Test Conditions                    | Min | Typ | Max | Unit    |
|---|---------------|------------------------------------|-----|-----|-----|---------|
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$     | $I_C=10mA$ $I_B=0$                 | 230 |     |     | V       |
| Collector Cut-Off Current               | $I_{CBO}$     | $V_{CB}=230V$ $I_E=0$              |     |     | 1.0 | $\mu A$ |
| Emitter Cut-Off Current                 | $I_{EBO}$     | $V_{EB}=5.0V$ $I_C=0$              |     |     | 1.0 | $\mu A$ |
| DC Current Gain                         | $h_{FE}$      | $V_{CE}=5.0V$ $I_C=100mA$          | 100 |     | 320 |         |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C=500mA$ $I_B=50mA$             |     |     | 1.5 | V       |
| Base to Emitter Voltage                 | $V_{BE}$      | $V_{CE}=5.0V$ $I_C=500mA$          |     |     | 1.0 | V       |
| Transition Frequency                    | $f_T$         | $V_{CE}=10V$ $I_C=100mA$           |     | 100 |     | MHz     |
| Collector output capacitance            | $C_{ob}$      | $V_{CB}=10V$ $I_E=0$<br>$f=1.0MHz$ |     | 20  |     | pF      |

/ Electrical Characteristic Curve



/ Package Dimensions



**3DA4793**  
Rev.F Mar.-2016

