

### / Descriptions

TO-252          PNP          Silicon PNP transistor in a TO-252 Plastic Package.

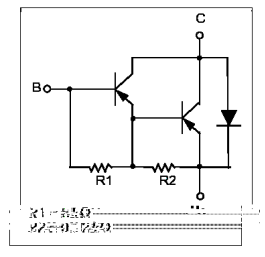
### / Features

TIP122D  
Complement to TIP122D.

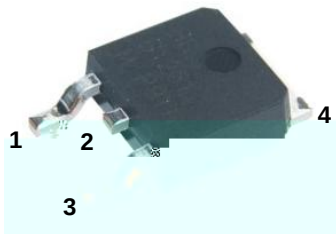
### / Applications

Medium power linear switching applications.

### / Equivalent Circuit



### / Pinning



PIN1    Base          PIN 2,4    Collector          PIN 3    Emitter

### / $h_{FE}$ Classifications & Marking

See Marking Instructions.

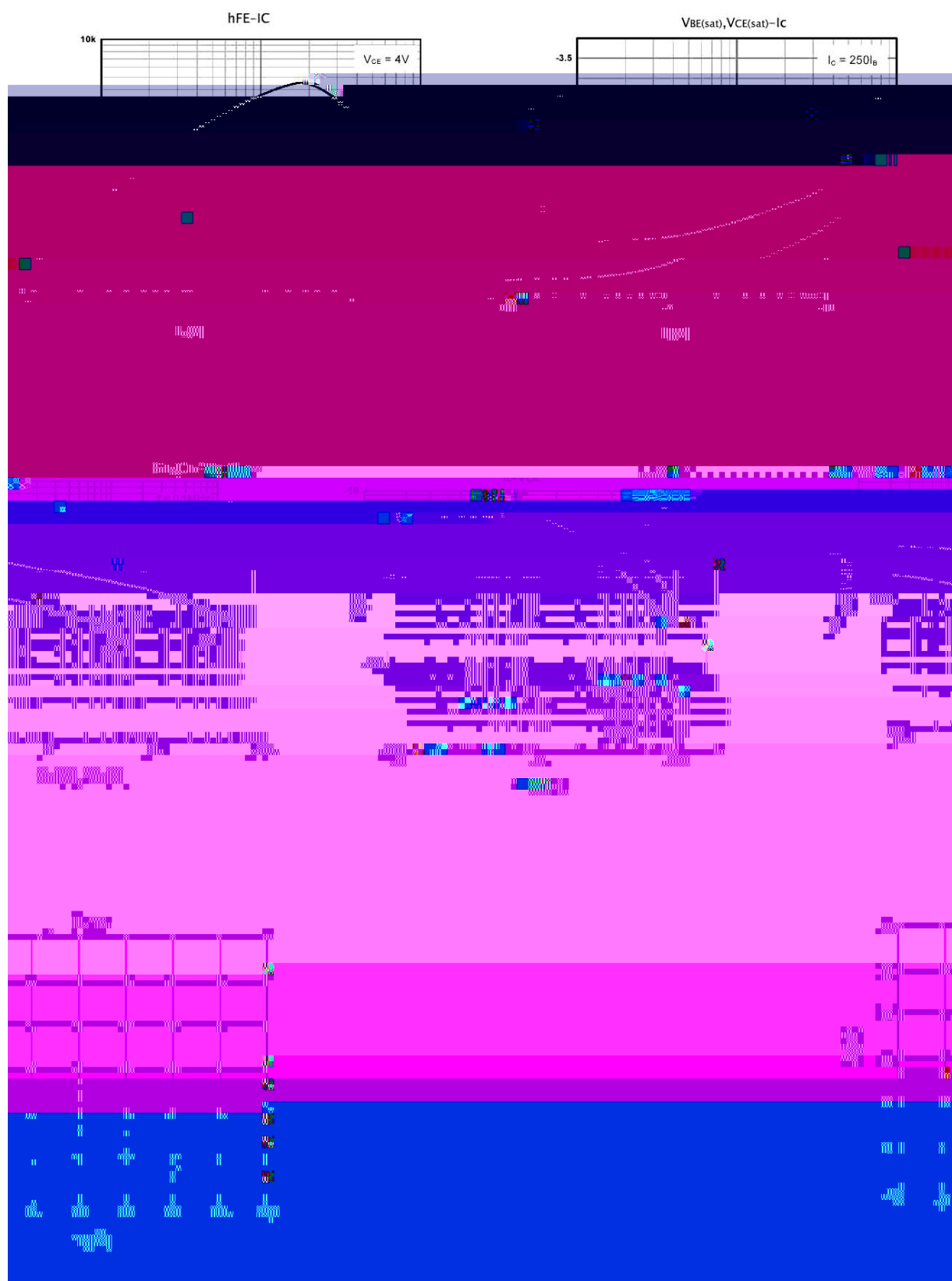
**/ Absolute Maximum Ratings(Ta=25 )**

| Parameter                      | Symbol        | Rating  | Unit |
|--------------------------------|---------------|---------|------|
| Collector to Base Voltage      | $V_{CBO}$     | -100    | V    |
| Collector to Emitter Voltage   | $V_{CEO}$     | -100    | V    |
| Emitter to Base Voltage        | $V_{EBO}$     | -5.0    | V    |
| Collector Current - Continuous | $I_C$         | -5.0    | A    |
| Collector Power Dissipation    | $P_C(T_C=25)$ | 40      | W    |
| Junction Temperature           | $T_j$         | 150     |      |
| Storage Temperature Range      | $T_{stg}$     | -55 150 |      |

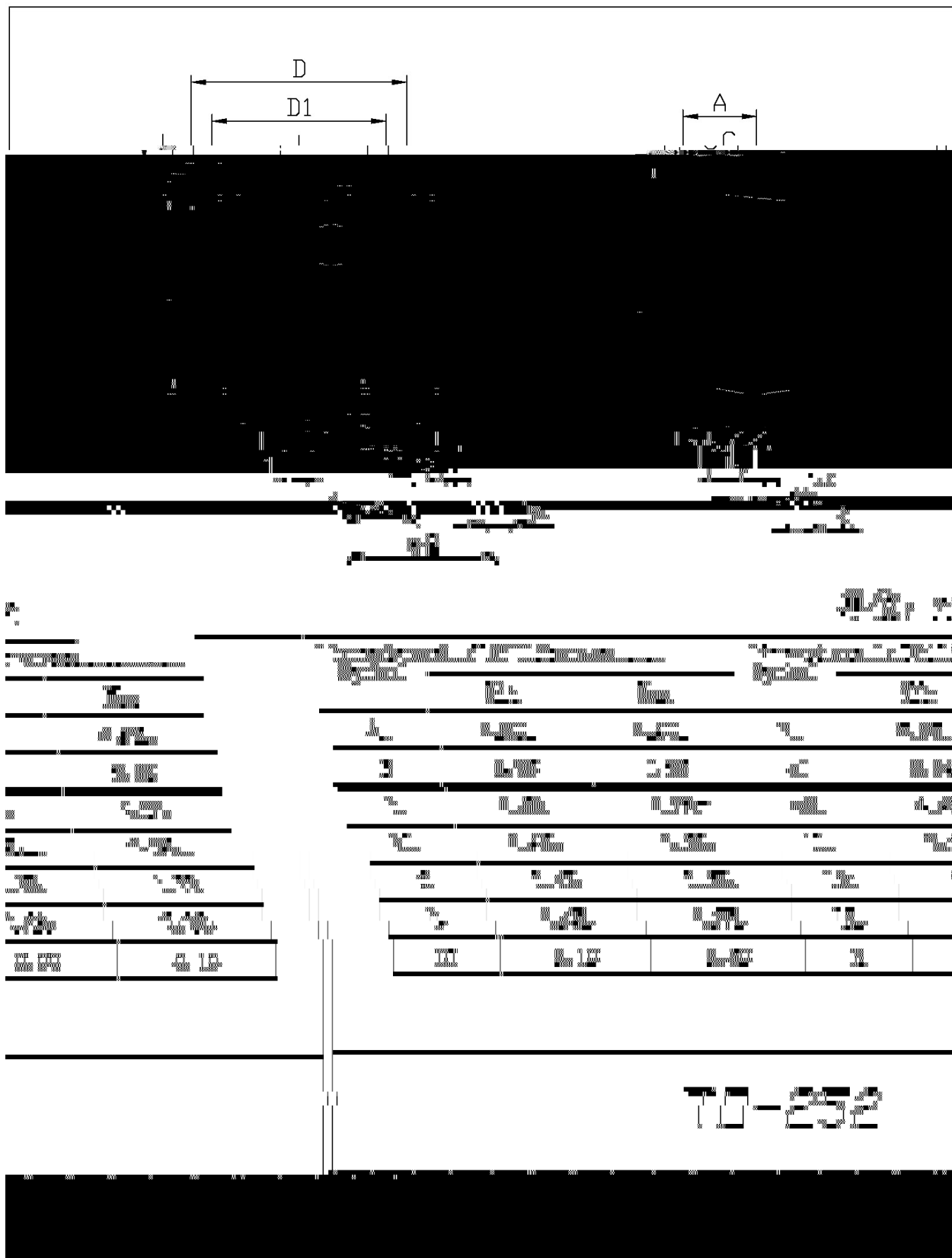
**/ Electrical Characteristics(Ta=25 )**

| Parameter                               | Symbol           | Test Conditions                     | Min  | Typ | Max  | Unit |
|-----------------------------------------|------------------|-------------------------------------|------|-----|------|------|
| Collector to Emitter Breakdown Voltage  | $V_{CEO}$        | $I_C=-100mA$ $I_B=0$                | -100 |     |      | V    |
| Collector Cut-Off Current               | $I_{CBO}$        | $V_{CE}=-50V$ $I_B=0$               |      |     | -2.0 | mA   |
| Collector Cut-Off Current               | $I_{CEO}$        | $V_{CB}=-100V$ $I_E=0$              |      |     | -1.0 | mA   |
| Emitter Cut-Off Current                 | $I_{EBO}$        | $V_{EB}=-5.0V$ $I_C=0$              |      |     | -2.0 | mA   |
| DC Current Gain                         | $h_{FE(1)}$      | $V_{CE}=-3.0V$ $I_C=-0.5A$          | 1000 |     |      |      |
|                                         | $h_{FE(2)}$      | $V_{CE}=-3.0V$ $I_C=-3.0A$          | 1000 |     |      |      |
| Collector to Emitter Saturation Voltage | $V_{CE(sat)(1)}$ | $I_C=-3.0A$ $I_B=-12mA$             |      |     | -2.0 | V    |
|                                         | $V_{CE(sat)(2)}$ | $I_C=-5.0A$ $I_B=-20mA$             |      |     | -4.0 | V    |
| Base to Emitter Voltage                 | $V_{BE}$         | $I_C=-3.0A$ $V_{CE}=-3.0V$          |      |     | -2.5 | V    |
| Collector output capacitance            | $C_{ob}$         | $V_{CB}=-10V$ $I_E=0$<br>$f=0.1MHz$ |      |     | 300  | pF   |

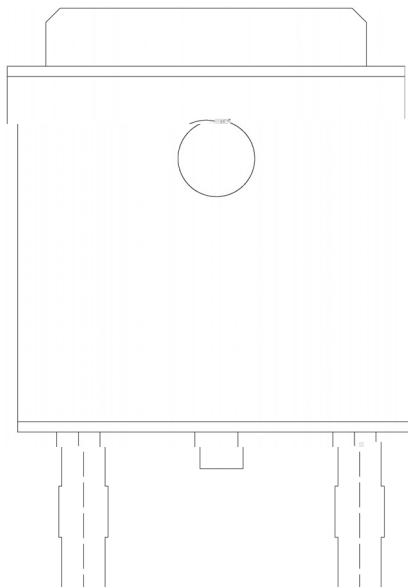
/ Electrical Characteristic Curve



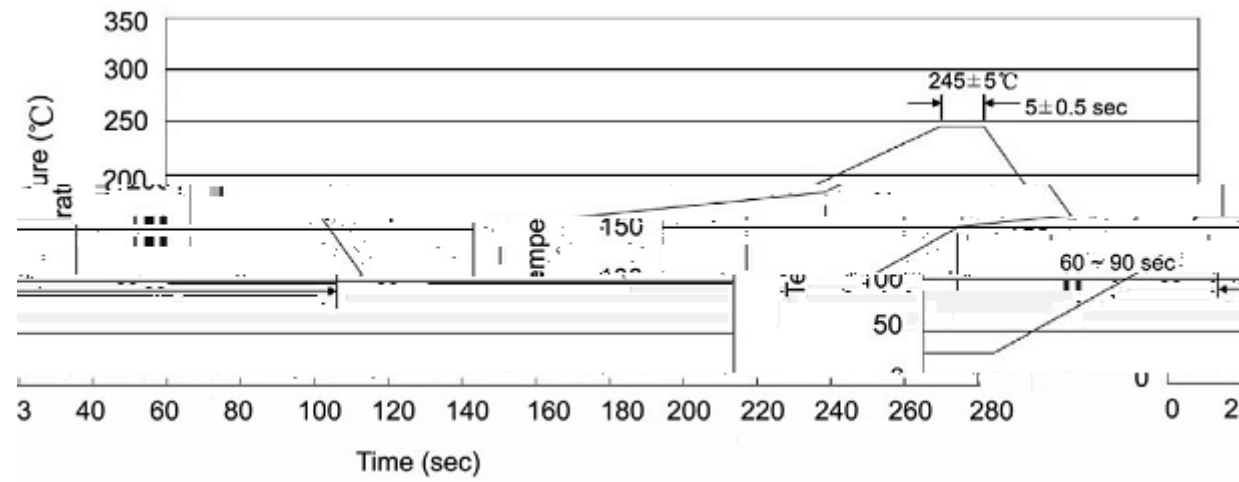
## / Package Dimensions



**/ Marking Instructions**



(     ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

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