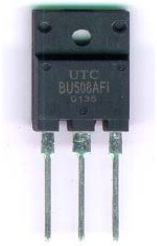
# UTC BU508AFI NPN EPITAXIAL SILICON TRANSISTOR

## SILICON DIFFUSED POWER TRANSISTOR

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TO-3PML

1. BASE
2. COLLECTOR
3. EMITTER

## DESCRIPTION

The UTC BU508AFI is high voltage, high speed switching NPN transistors in a plastic envelope, primarily for use in horizontal deflection circuites of colour television receivers.

## Features

* TV color horizontal deflection.

* With TO-3PML fully isolated package.

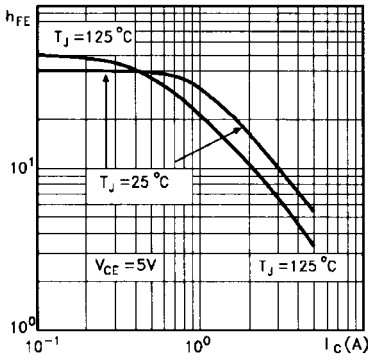
## Absolute Maximum Rating Tc=25°C

| PARAMETER | SYMBOL | VALUE | UNIT |
|---|---|---|---|
| Collector-base voltage($V_{BE}$=0) | $V_{CBO}$ | 1500 | V |
| Collector-emitter voltage($I_B$=0) | $V_{CEO}$ | 700 | V |
| Emitter-base Voltage($I_C$=0) | $V_{EBO}$ | 10 | V |
| Collector peak current | Icp | 15 | A |
| Collector current | Ic | 8 | A |
| Collector power dissipation | Pc | 60 | W |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -65~150 | °C |

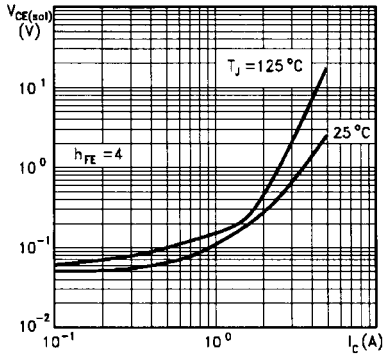
## ELECTRICAL CHARACTERISTICS Tc=25°C

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | MAX | UNIT |
|---|---|---|---|---|---|
| Collector-base cut off current | $I_{CBO}$ | $V_{cE}$=1500V, $V_{BE}$=0 | | 2.0 | mA |
| Emitter-base cut off current | $I_{EBO}$ | $V_{EB}$=5V, $I_C$=0 | | 100 | uA |
| Collector-emitter Sustaining voltage | $V_{CEO(sus)}$ | $I_C$=100mA, $I_B$=0 | 700 | | V |
| Emitter-base breakdown voltage | $V_{EBO}$ | $I_E$=10mA, $I_C$=0 | 10 | | V |
| Collector-emitter saturation voltage | $V_{CE(SAT)}$ | $I_C$=4.5A, $I_B$=2A | | 1.0 | V |
| Base-emitter saturation voltage | $V_{BE(SAT)}$ | $I_C$=4.5A, $I_B$=2A | | 1.3 | V |
| Base current peak value | $H_{FE}$ | $I_C$=100mA, $V_{CE}$=5V | 6 | 30 | |

DC Current Gain




Collector Emitter Saturation Voltage




Base Emitter Saturation Voltage