

# UTC BU508AFI NPN EPITAXIAL SILICON TRANSISTOR

## SILICON DIFFUSED POWER TRANSISTOR

### DESCRIPTION

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



TO-3PML

1. BASE
2. COLLECTOR
3. EMITTER

1 2 3

### Features

- \* TV color horizontal deflection.
- \* With TO-3PML fully isolated package.

### Absolute Maximum Rating $T_c=25^\circ\text{C}$

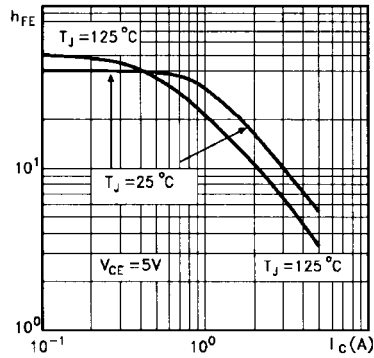
PARAMETER	SYMBOL	VALUE	UNIT
Collector-base voltage( $V_{BE}=0$ )	$V_{CBO}$	1500	V
Collector-emitter voltage( $I_B=0$ )	$V_{CEO}$	700	V
Emitter-base Voltage( $I_C=0$ )	$V_{EBO}$	10	V
Collector peak current	$I_{cp}$	15	A
Collector current	$I_C$	8	A
Collector power dissipation	$P_c$	60	W
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-65~150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS $T_c=25^\circ\text{C}$

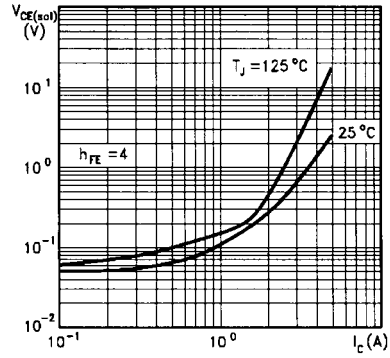
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-base cut off current	$I_{CBO}$	$V_{CE}=1500\text{V}, V_{BE}=0$		2.0	mA
Emitter-base cut off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$		100	$\mu\text{A}$
Collector-emitter Sustaining voltage	$V_{CEO(SUS)}$	$I_C=100\text{mA}, I_B=0$	700		V
Emitter-base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

# UTCBU508AF1 NPN EPITAXIAL SILICON TRANSISTOR

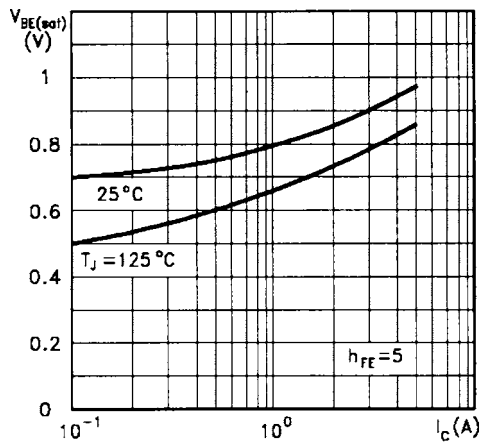
DC Current Gain



Collector Emitter Saturation Voltage



Base Emitter Saturation Voltage



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