

# UTC BU407

# NPN EXPITAXIAL PLANAR TRANSISTOR

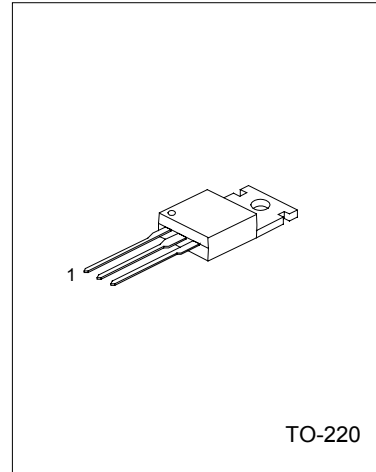
## NPN EXPITAXIAL PLANAR TRANSISTOR

### DESCRIPTION

The UTC BU407 is a NPN epitaxial planar transistor, designed for use in TV Horizontal output and switching applications.

### FEATURE

\*High breakdown voltage



1:BASE 2:COLLECTOR 3:EMITTER

### ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Collector Base Voltage	V <sub>CB0</sub>	330	V
Collector to Emitter Voltage	V <sub>CEO</sub>	150	V
Emitter To Base Voltage	V <sub>EBO</sub>	6	V
Collector Current	I <sub>C</sub>	7	A
Base Current	I <sub>B</sub>	4	A
Collector Dissipation (T <sub>a</sub> =25°C)	P <sub>c</sub>	60	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-50 ~ +150	°C

### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining Voltage	V <sub>CE0</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =0	150			V
Collect Cutoff Current	I <sub>CEs</sub>	V <sub>CE</sub> =400V			5	mA
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>BE</sub> =6V, I <sub>C</sub> =0			1	mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =5A, I <sub>B</sub> =0.5A			1	V
Base-Emitter On Voltage	V <sub>BE(sat)</sub>	I <sub>C</sub> =5A, I <sub>B</sub> =0.5A			1.2	V
DC Current Gain	HFE1	I <sub>C</sub> =500mA, V <sub>CE</sub> =5V	25			
	HFE2	I <sub>C</sub> =2A, V <sub>CE</sub> =5V	35		200	
	HFE3	I <sub>C</sub> =5A, V <sub>CE</sub> =5V	10			
Current Gain Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> =500mA, V <sub>CE</sub> =10V f=1MHz	10			MHz

### CLASSIFICATION OF hFE2

RANK	B	C	D
RANGE	35-85	75-125	115-200

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