

### BU407/407H

### **High Voltage Switching**

Use In Horizontal Deflection Output Stage



1.Base 2.Collector 3.Emitter

## **NPN Epitaxial Silicon Transistor**

### Absolute Maximum Ratings $T_C=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	330	V
V <sub>CEO</sub>	Collector-Emitter Voltage	150	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current (DC)	7	Α
I <sub>CP</sub>	Collector Current (Pulse)	10	Α
I <sub>B</sub>	Base Current	4	Α
P <sub>C</sub>	Collector Dissipation (T <sub>C</sub> =25°C)	60	W
TJ	Junction Temperature	150	°C
T <sub>STG</sub>	Storage Temperature	- 65 ~ 150	°C

### **Electrical Characteristics** $T_C=25$ °C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
I <sub>CES</sub>	Collector Cut-off Current	$V_{CE} = 330V, V_{BE} = 0$		5	mA
		$V_{CE} = 200 V, V_{BE} = 0$		100	μΑ
		$V_{CE} = 200V, V_{BE} = 0 @ T_{C} = 150^{\circ}C$		1	mA
I <sub>EBO</sub>	Emitter Cut-off Current	$V_{BE} = 6V, I_{C} = 0$		1	mA
V <sub>CE</sub> (sat)	Collector-Emitter Saturation Voltage				
	: BU407	$I_C = 5A, I_B = 0.5A$		1	V
	: BU407H	$I_C = 5A, I_B = 0.8A$		1	V
V <sub>BE</sub> (sat)	Base-Emitter Saturation Voltage				
	: BU407	$I_C = 5A, I_B = 0.5A$		1.2	V
	: BU407H	$I_C = 5A$ , $I_B = 0.8A$		1.2	V
f <sub>T</sub>	Current Gain Bandwidth Product	$V_{CE} = 10V, I_{C} = 0.5A$	10		MHz
t <sub>OFF</sub>	Turn OFF Time				
	: BU407	$I_C = 5A, I_B = 0.5A$		0.75	μs
	: BU407H	$I_C = 5A, I_B = 0.5A$ $I_C = 5A, I_B = 0.8A$		0.4	μs

# **Typical Characteristics**

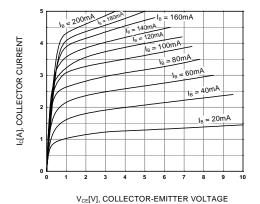


Figure 1. Static Characteristic

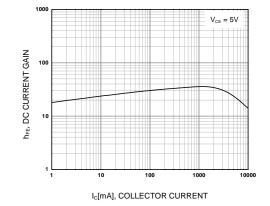


Figure 2. DC current Gain

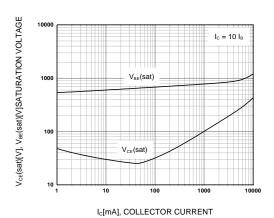


Figure 3. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

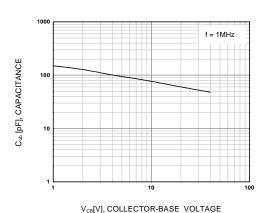


Figure 4. Collector Output Capacitance

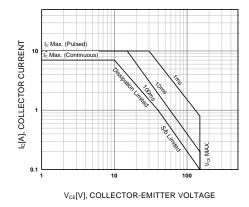


Figure 5. Safe Operating Area

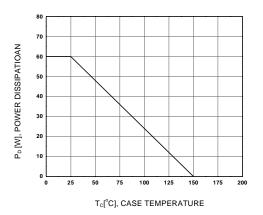
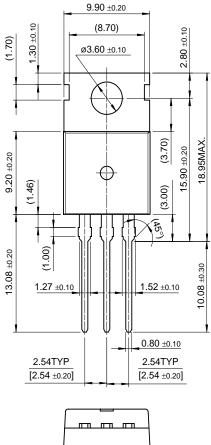


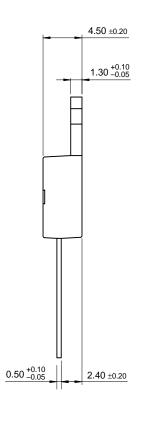
Figure 6. Power Derating

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# **Package Demensions**

# TO-220





10.00 ±0.20

Dimensions in Millimeters

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