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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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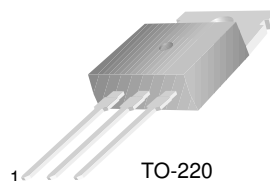
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



BU806/807

High Voltage & Fast Switching Darlington Transistor

- Using In Horizontal Output Stages of 110° Crt Video Displays
- BUILT-IN SPEED-UP Diode Between Base and Emitter



TO-220
1.Base 2.Collector 3.Emitter

NPN Epitaxial Silicon Darlington Transistor

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage : BU806 : BU807	400	V
		330	V
V_{CEO}	Collector-Emitter Voltage : BU806 : BU807	200	V
		150	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current (DC)	8	A
I_{CP}	*Collector Current (Pulse)	15	A
I_B	Base Current	2	A
P_C	Collector Dissipation ($T_C=25^\circ\text{C}$)	60	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature	- 55 ~150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
$V_{CEO}(\text{sus})$	* Collector-Emitter Sustaining Voltage : BU806 : BU807	$I_C = 100\text{mA}, I_B = 0$	200		V
			150		V
I_{CES}	Collector Cut-off Current : BU806 : BU807	$V_{CE} = 400\text{V}, V_{BE} = 0$ $V_{CE} = 330\text{V}, V_{BE} = 0$		100	μA
				100	μA
I_{CEV}	Collector Cut-off Current : BU806 : BU807	$V_{CE} = 400\text{V}, V_{BE} = -6\text{V}$ $V_{CE} = 330\text{V}, V_{BE} = -6\text{V}$		100	μA
				100	μA
I_{EBO}	Emitter Cut-off Current	$V_{BE} = 6\text{V}, I_C = 0$		3	mA
$V_{CE}(\text{sat})$	* Collector-Emitter Saturation Voltage	$I_C = 5\text{A}, I_B = 50\text{mA}$		1.5	V
$V_{BE}(\text{sat})$	* Base-Emitter Saturation Voltage	$I_C = 5\text{A}, I_B = 50\text{mA}$		2.4	V
V_F	* Damper Diode Forward Voltage	$I_F = 4\text{A}$		2	V

* Pulsed: pulsed duration = 300 μs , duty cycle = 1.5%

Typical Characteristics

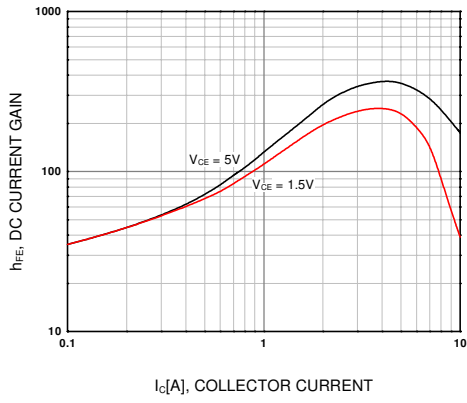


Figure 1. DC current Gain

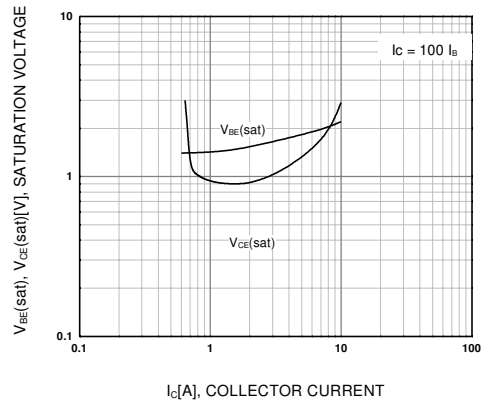


Figure 2. Collector-Emitter Saturation Voltage
Base-Emitter Saturation Voltage

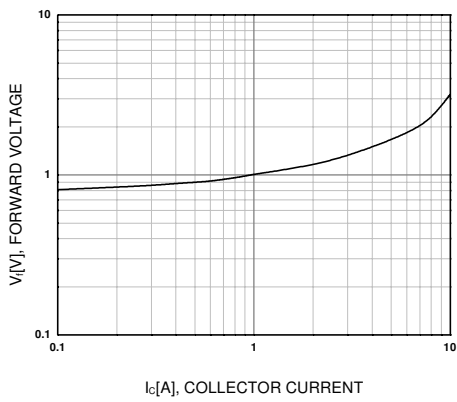


Figure 3. Damper Diode

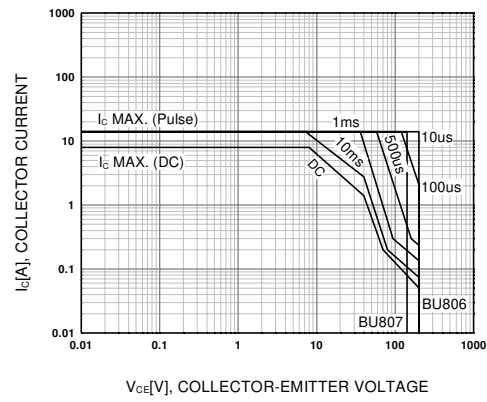


Figure 4. Safe Operating Area

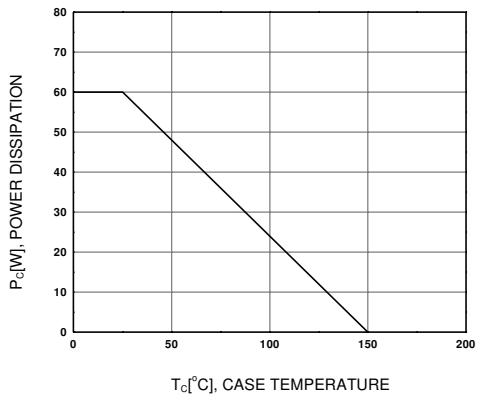
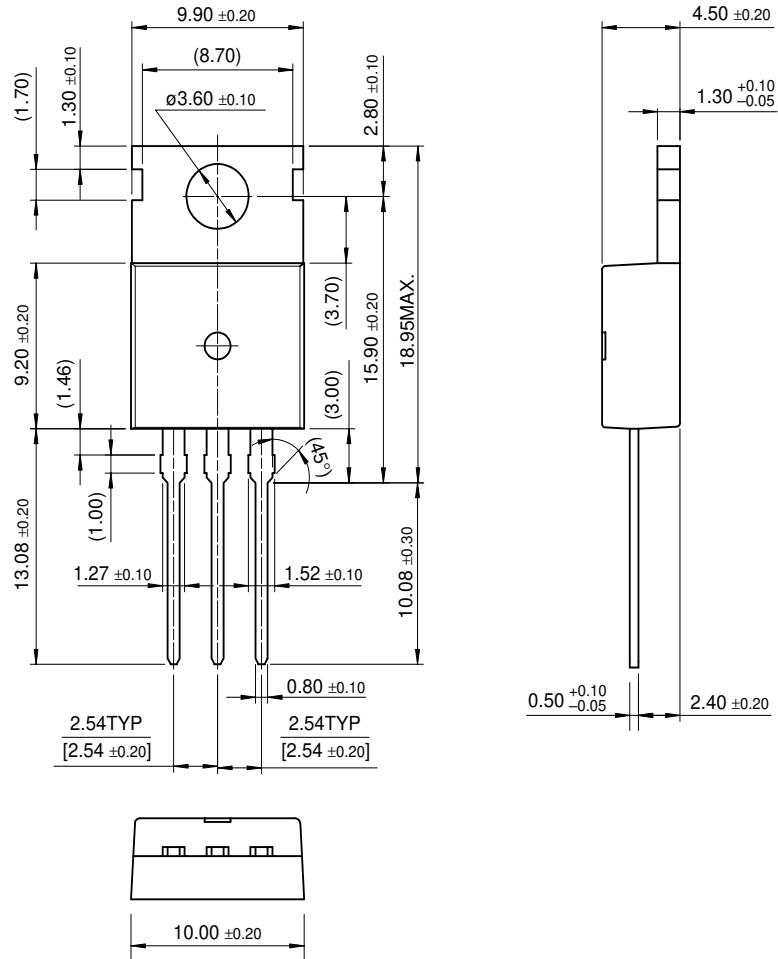


Figure 5. Power Derating

Package Dimensions

BU806/807

TO-220



Dimensions in Millimeters

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