

**Silicon NPN Darlington Power Transistor**

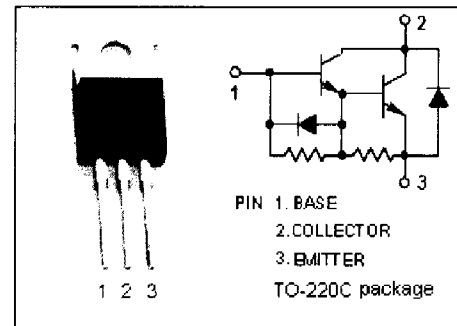
**BU807**

**DESCRIPTION**

- High Voltage:  $V_{CBO} = 330V(\text{Min})$
- Low Saturation Voltage-  
 $V_{CE(\text{sat})} = 1.5V(\text{Max}) @ I_C = 5A$

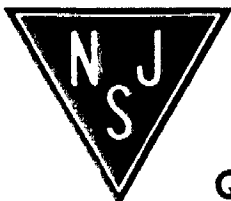
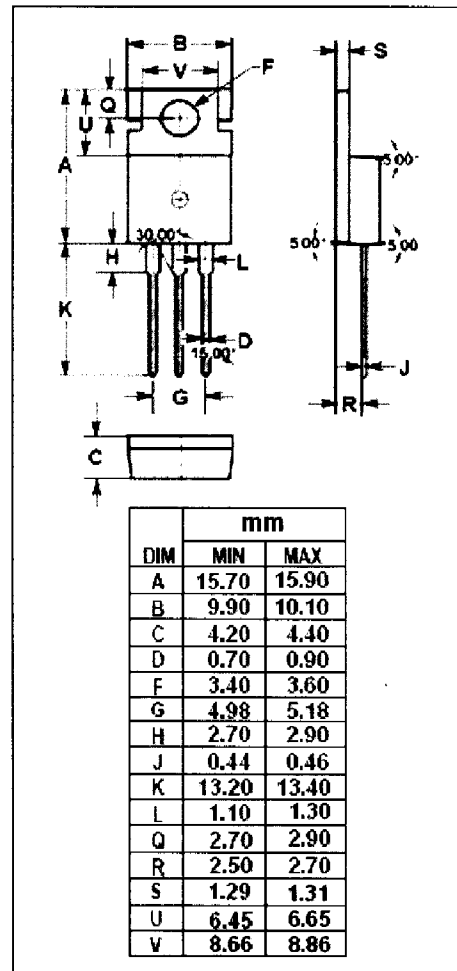
**APPLICATIONS**

- Designed for use in horizontal deflection circuits in TV's and CRT's.



**ABSOLUTE MAXIMUM RATINGS ( $T_a = 25^\circ\text{C}$ )**

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	330	V
$V_{CEV}$	Collector-Emitter Voltage	330	V
$V_{CEO}$	Collector-Emitter Voltage	150	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	8	A
$I_{CM}$	Collector Current-Peak	15	A
$I_B$	Base Current	2	A
$P_C$	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	60	W
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ\text{C}$



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**Silicon NPN Darlington Power Transistor****BU807****ELECTRICAL CHARACTERISTICS****T<sub>C</sub>=25°C unless otherwise specified**

<b>SYMBOL</b>	<b>PARAMETER</b>	<b>CONDITIONS</b>	<b>MIN</b>	<b>TYP.</b>	<b>MAX</b>	<b>UNIT</b>
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = 100mA; I <sub>B</sub> = 0	150			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 50mA			1.5	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 50mA			2.4	V
I <sub>CES</sub>	Collector Cutoff Current	V <sub>CE</sub> = 330V; V <sub>BE</sub> = 0			0.1	mA
I <sub>CEV</sub>	Collector Cutoff Current	V <sub>CE</sub> = 330V; V <sub>BE(off)</sub> = 6V			0.1	mA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 6V; I <sub>C</sub> = 0			3.0	mA
V <sub>ECF</sub>	C-E Diode Forward Voltage	I <sub>F</sub> = 4A			2.0	V