

isc Silicon NPN Darlington Power Transistor
BU806F
DESCRIPTION

- High voltage
- High switching speed
- Low saturation voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

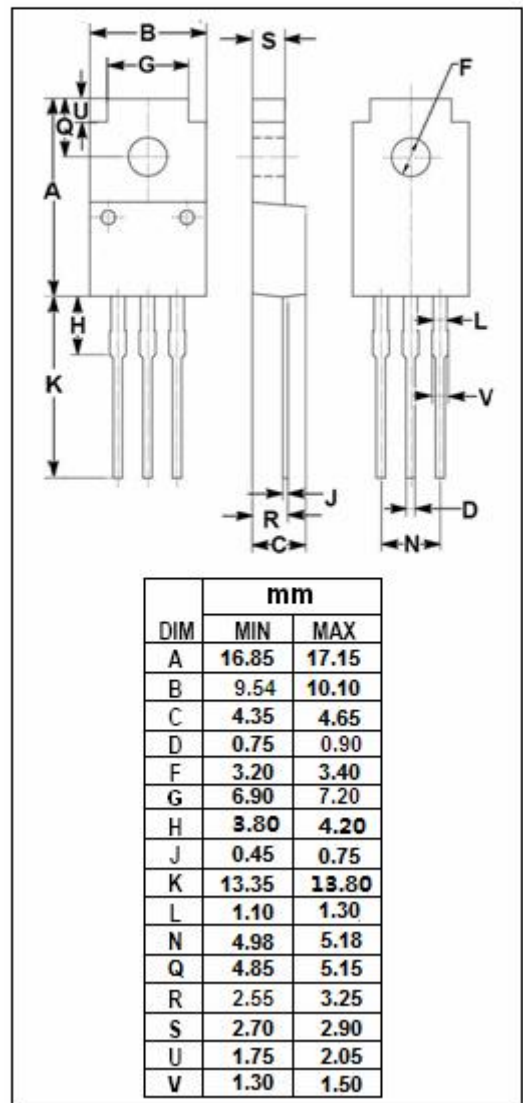
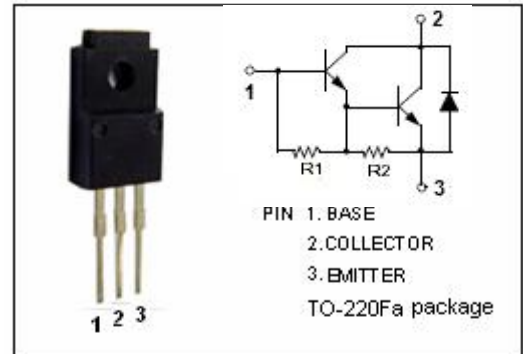
- This Darlington transistor is a high voltage ,high speed device for use in horizontal deflection circuits in TV's and CRT's

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector- Base Voltage	400	V
V_{CEV}	Collector- Emitter Voltage	400	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak	15	A
P_C	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	30	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-65~150	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.16	$^{\circ}\text{C/W}$



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)^*}$	Collector-Emitter Sustaining Voltage	$I_C= 50\text{mA}; I_B= 0$	200			V
$V_{CE(sat)^*}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 50\text{mA}$			1.5	V
$V_{BE(sat)^*}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 50\text{mA}$			2.4	V
I_{CES}	Collector Cutoff Current	$V_{CE}= \text{Rated } V_{CBO}; V_{BE}= 0$			0.1	mA
I_{CEV}	Collector Cutoff Current	$V_{CE}= \text{Rated } V_{CEV}; V_{BE(off)}= 6\text{V}$			0.1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 6\text{V}; I_C=0$			3.5	mA
V_{ECF}^*	C-E Diode Forward Voltage	$I_F= 4\text{A}$			2.0	V

*:Pulse test:pulse width $\leq 300\mu\text{s}$,duty cycle $\leq 1.5\%$ **NOTICE:**

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