

isc Silicon NPN Darlington Power Transistor

BU826

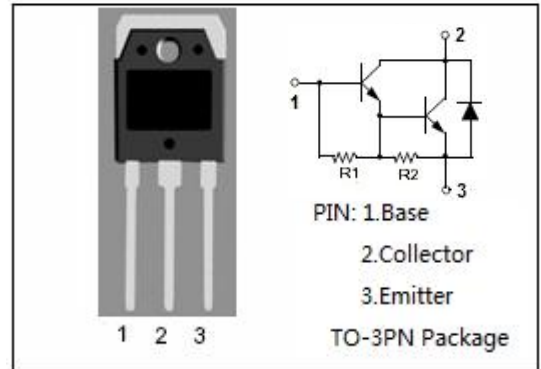
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 375V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

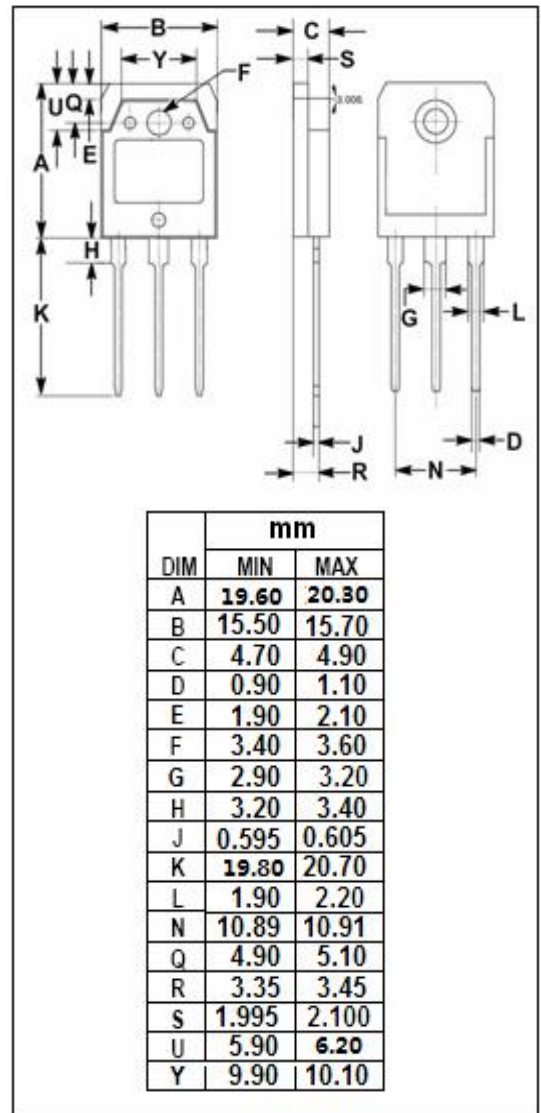
Designed for line operated switchmode applications such as:

- Switching regulators
- Inverters
- Solenoid and relay drivers



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage($V_{BE} = 0$)	800	V
V_{CEO}	Collector-Emitter Voltage	375	V
V_{EBO}	Emitter-Base Voltage	8	V
I_C	Collector Current-Continuous	6	A
I_{CM}	Collector Current-Peak	8	A
I_B	Base Current	0.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	125	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.0	$^\circ\text{C/W}$

isc Silicon NPN Darlington Power Transistor**BU826****ELECTRICAL CHARACTERISTICS** $T_C=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE0(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 50\text{mA}; I_B= 0$	375			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 2.5\text{A}; I_B= 55\text{mA}$			2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 4\text{A}; I_B= 0.2\text{A}$			2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 2.5\text{A}; I_B= 55\text{mA}$			2.2	V
I_{CES}	Collector Cutoff Current	$V_{CE}= \text{Rated } V_{CES}; R_{BE}= 0$ $V_{CE}= \text{Rated } V_{CES}; R_{BE}= 0, T_C= 125^\circ\text{C}$			1.0 2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 8\text{V}; I_C= 0$			150	mA

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