

**Silicon NPN Darlington Power Transistor**

**BU826A**

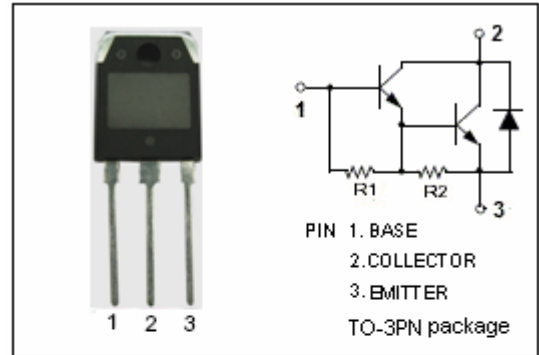
**DESCRIPTION**

- Collector-Emitter Sustaining Voltage-  
:  $V_{CEO(SUS)} = 400V(\text{Min})$
- High Switching Speed

**APPLICATIONS**

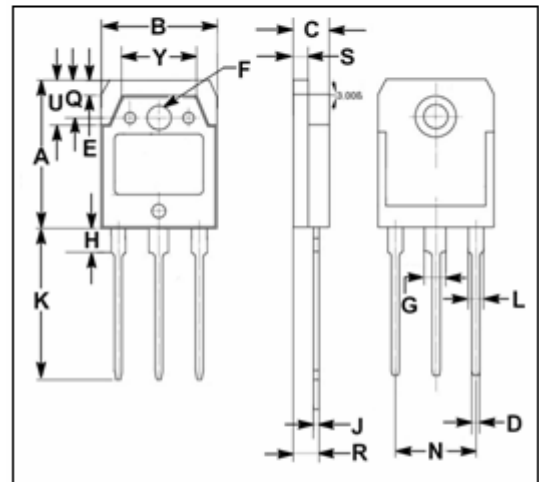
Designed for line operated switchmode applications such as:

- 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( $V_{BE} = 0$ )	1000	V
$V_{CEO}$	Collector-Emitter Voltage	400	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 @ $T_C=25$	125	W
$T_J$	Junction Temperature	150	
$T_{stg}$	Storage Temperature Range	-65~150	



DIM	mm	
	MIN	MAX
A	19.90	20.10
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.10
H	3.20	3.40
J	0.595	0.605
K	20.50	20.70
L	1.90	2.10
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.005
U	5.90	6.10
Y	9.90	10.10

**THERMAL CHARACTERISTICS**

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

**Silicon NPN Darlington Power Transistor****BU826A****ELECTRICAL CHARACTERISTICS** $T_C=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 100mA ; I_B= 0, L= 25mH$	400			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C= 2.5A; I_B= 55mA$			2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	$I_C= 4A; I_B= 0.2A$			2.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 2.5A; I_B= 55mA$			2.2	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}= RatedV_{CES}; R_{BE}= 0$ $V_{CE}= RatedV_{CES}; R_{BE}= 0, T_C= 125$			1.0 2.0	mA
$I_{EBO}$	Emitter Cutoff Current	$V_{EB}= 8V; I_C= 0$			150	mA