

# BU326A

## HIGH VOLTAGE NPN SILICON POWER TRANSISTOR

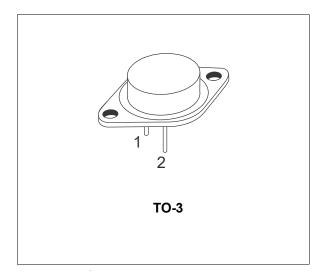
- STMicroelectronics PREFERRED SALESTYPE
- NPN TRANSISTOR
- FAST SWITCHING SPEED

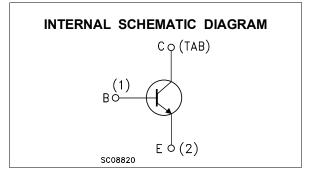
#### **APPLICATIONS:**

- POWER SUPPLIES
- LINEAR AND SWITCHING INDUSTRIAL EQUIPMENT

#### DESCRIPTION

The BU326A is a silicon multiepitaxial mesa NPN transistor in Jedec TO-3 metal case particularly intended for switch-mode CTV supply system.





#### **ABSOLUTE MAXIMUM RATINGS**

Symbol	Parameter	Value	Unit
$V_{CES}$	Collector-Emitter Voltage (V <sub>BE</sub> = 0)	900	V
V <sub>CEO</sub>	Collector-Emitter Voltage ( $I_B = 0$ )	400	V
V <sub>EBO</sub>	Emitter-Base Voltage (I <sub>C</sub> = 0)	10	V
lc	Collector Current	6	А
Ісм	Collector Peak Current	8	A
Ι <sub>Β</sub>	Base Current	3	A
P <sub>tot</sub>	Total Power Dissipation at $T_{case} \le 25 \ ^{\circ}C$	75	W
T <sub>stg</sub>	Storage Temperature	-65 to 200	°C
Tj	Max. Operating Junction Temperature	200	°C

#### THERMAL DATA

R <sub>thj-case</sub> Thermal Resistance Junction	ase Max	2.33	°C/W	Ì
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### **ELECTRICAL CHARACTERISTICS** (T<sub>case</sub> = 25 $^{\circ}$ C unless otherwise specified)

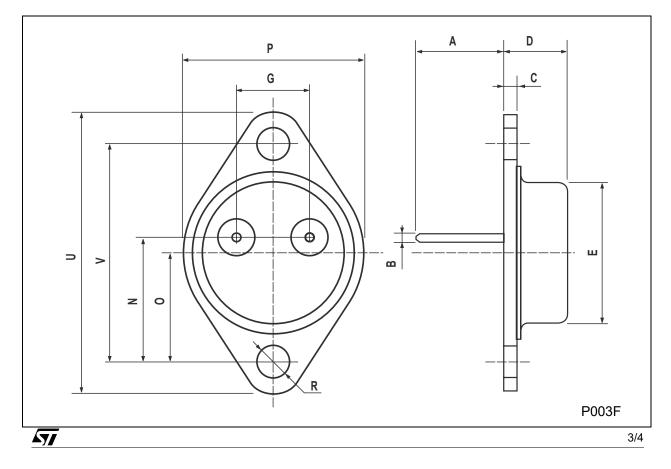
Symbol	Parameter	Test Conditions		Parameter Test Conditions Mir		Min.	. Тур.	Max.	Unit
I <sub>CES</sub>	Collector Cut-off Current (V <sub>BE</sub> = 0)	V <sub>CE</sub> = 900 V V <sub>CE</sub> = 900 V	T <sub>c</sub> = 125 °C			1 2	mA mA		
I <sub>EBO</sub>	Emitter Cut-off Current (I <sub>C</sub> = 0)	V <sub>EB</sub> = 10 V				10	mA		
$V_{CEO(sus)}^{*}$	Collector-Emitter Sustaining Voltage(I <sub>B</sub> = 0)	I <sub>C</sub> = 100 mA		400			V		
V <sub>CE(sat)</sub> *	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 2.5 A I <sub>C</sub> = 4 A	I <sub>B</sub> = 0.5 A I <sub>B</sub> = 1.25 A			1.5 3	V V		
V <sub>BE(sat)</sub> *	Base-Emitter Saturation Voltage	I <sub>C</sub> = 2.5 A I <sub>C</sub> = 4 A	I <sub>B</sub> = 0.5 A I <sub>B</sub> = 1.25 A			1.4 1.6	V		
h <sub>FE</sub> *	DC Current Gain	I <sub>C</sub> = 1 A	V <sub>CE</sub> = 5 V		25				
t <sub>on</sub>	Turn-on Time	I <sub>C</sub> = 2.5 A V <sub>CC</sub> = 250 V	I <sub>B1</sub> = 0.5 A			0.5	μs		
ts	Storage Time	-	I <sub>B1</sub> = 0.5 A V <sub>CC</sub> = 250 V			3.5	μs		
t <sub>f</sub>	Fall Time	I <sub>B2</sub> = -1A A	I <sub>B1</sub> = 0.5 A V <sub>CC</sub> = 250 V			0.5	μs		

\* Pulsed: Pulse duration = 300  $\mu s,$  duty cycle 1.5 %

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**TO-3 MECHANICAL DATA** 

DIM.	mm			inch			
Dim	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.	
А	11.00		13.10	0.433		0.516	
В	0.97		1.15	0.038		0.045	
С	1.50		1.65	0.059		0.065	
D	8.32		8.92	0.327		0.351	
E	19.00		20.00	0.748		0.787	
G	10.70		11.10	0.421		0.437	
N	16.50		17.20	0.649		0.677	
Р	25.00		26.00	0.984		1.023	
R	4.00		4.09	0.157		0.161	
U	38.50		39.30	1.515		1.547	
V	30.00		30.30	1.187		1.193	



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