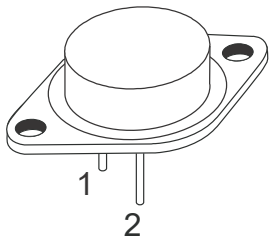
BU326A

HIGH VOLTAGE NPN SILICON POWER TRANSISTOR

- STMicroelectronics PREFERRED SALESTYPE
- NPN TRANSISTOR
- FAST SWITCHING SPEED

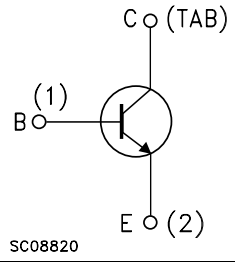
APPLICATIONS:
- POWER SUPPLIES
- LINEAR AND SWITCHING INDUSTRIAL EQUIPMENT



TO-3

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

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CES}	Collector-Emitter Voltage (V_{BE} = 0)	900	V
V_{CEO}	Collector-Emitter Voltage (I_B = 0)	400	V
V_{EBO}	Emitter-Base Voltage (I_C = 0)	10	V
I_C	Collector Current	6	A
I_{CM}	Collector Peak Current	8	A
I_B	Base Current	3	A
P_{tot}	Total Power Dissipation at $T_{case} \leq 25$ °C	75	W
T_{stg}	Storage Temperature	-65 to 200	°C
T_j	Max. Operating Junction Temperature	200	°C

THERMAL DATA

$R_{thj\text{-}case}$	Thermal Resistance Junction-case	Max	2.33	°C/W

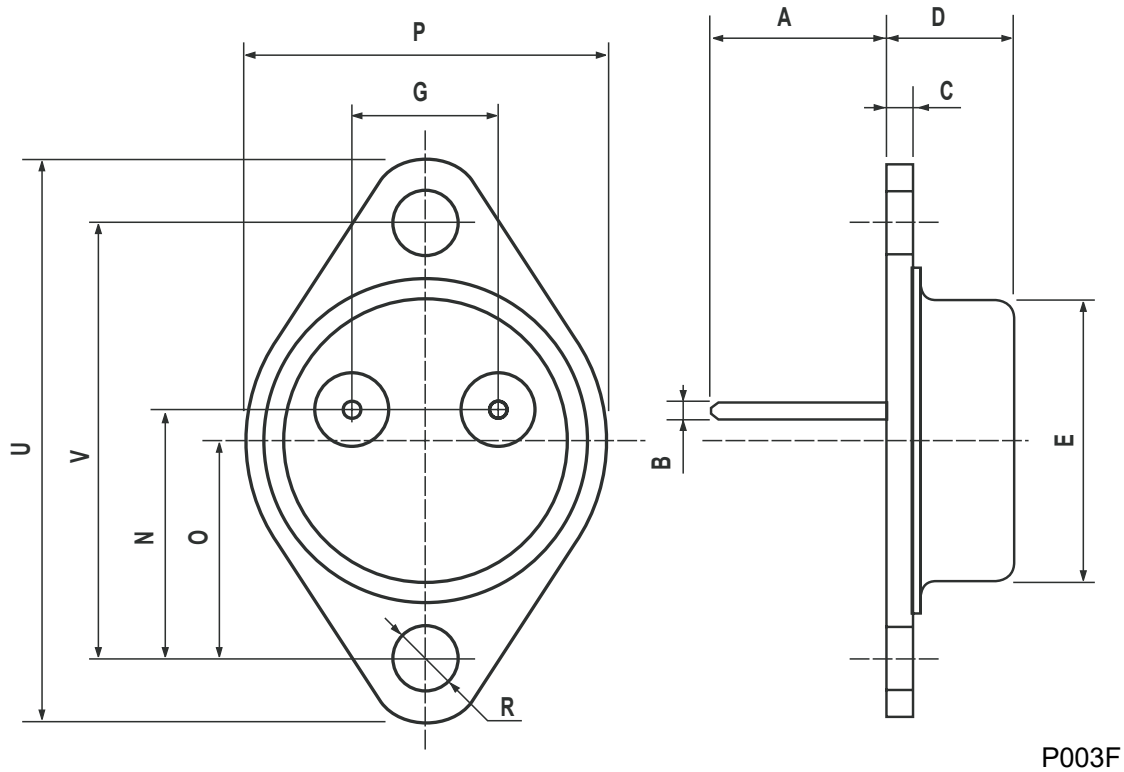
ELECTRICAL CHARACTERISTICS (T_{case} = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CES}	Collector Cut-off Current (V_{BE} = 0)	V_{CE} = 900 V V_{CE} = 900 V T_c = 125 °C			1 2	mA mA
I_{EBO}	Emitter Cut-off Current (I_C = 0)	V_{EB} = 10 V			10	mA
$V_{CEO(sus)}$*	Collector-Emitter Sustaining Voltage(I_B = 0)	I_C = 100 mA	400			V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C = 2.5 A I_B = 0.5 A I_C = 4 A I_B = 1.25 A			1.5 3	V V
$V_{BE(sat)}$*	Base-Emitter Saturation Voltage	I_C = 2.5 A I_B = 0.5 A I_C = 4 A I_B = 1.25 A			1.4 1.6	V
h_{FE}*	DC Current Gain	I_C = 1 A V_{CE} = 5 V		25		
t_{on}	Turn-on Time	I_C = 2.5 A I_{B1} = 0.5 A V_{CC} = 250 V			0.5	µs
t_s	Storage Time	I_C = 2.5 A I_{B1} = 0.5 A I_{B2} = -1A A V_{CC} = 250 V			3.5	µs
t_f	Fall Time	I_C = 2.5 A I_{B1} = 0.5 A I_{B2} = -1A A V_{CC} = 250 V			0.5	µs

* Pulsed: Pulse duration = 300 µs, duty cycle 1.5 %

TO-3 MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	11.00		13.10	0.433		0.516
B	0.97		1.15	0.038		0.045
C	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
P	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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