

isc Silicon NPN Power Transistor
BU526
DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 400V(\text{Min.})$
- High Speed Switching
- High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

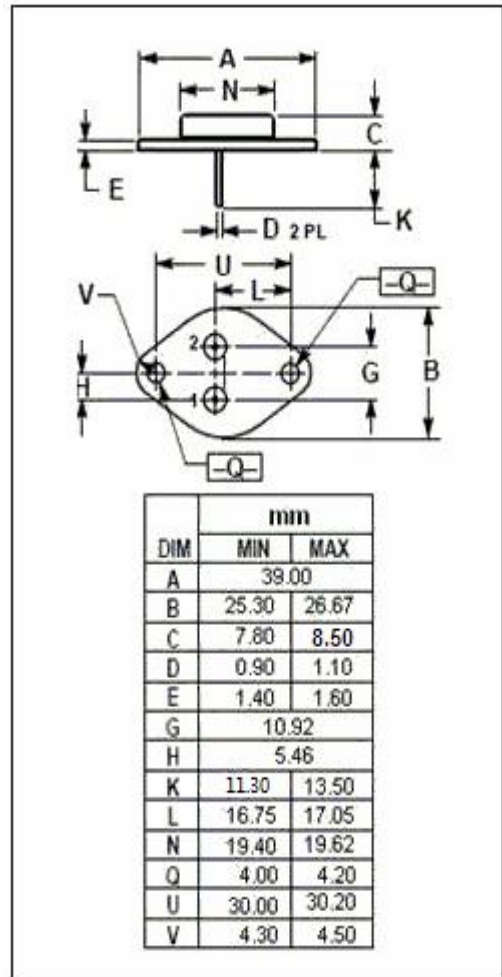
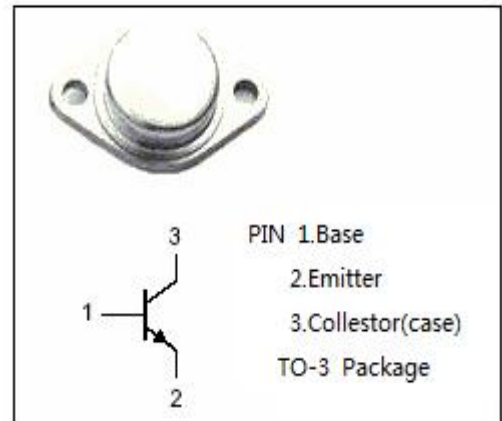
- Designed for use in switching mode power supply.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage	900	V
V_{CES}	Collector-Emitter Voltage	900	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	8	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	4	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	86	W
T_J	Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.75	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**BU526****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 50mA; I _B =0	400			V
V _{(BR)CER}	Collector-Emitter Breakdown Voltage	I _C = 0.5mA; R _{BE} ≤ 100 Ω	900			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	6			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 3A			5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 6A; I _B = 1.25A			1.4	V
I _{CES}	Collector Cutoff Current	V _{CE} =900V; V _{BE} = 0; V _{CE} =900V; V _{BE} = 0; T _C = 150°C			1.0 2.0	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	15		45	
h _{FE-2}	DC Current Gain	I _C = 4A; V _{CE} = 5V	6			
f _T	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		10		MHz

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