

isc Silicon NPN Power Transistor
BUV66
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 450V(\text{Min.})$
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

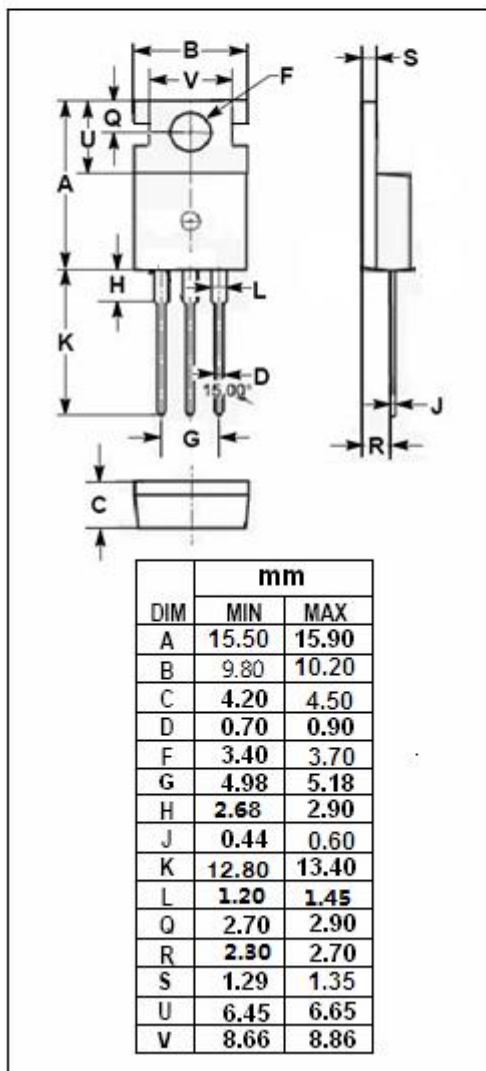
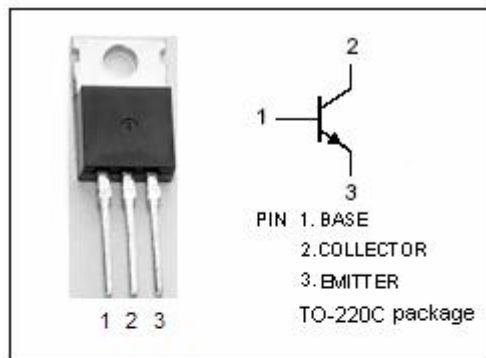
- Designed for switch mode power supply, UPS, DC and AC motor control applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage $V_{BE} = -1.5V$	850	V
V_{CEO}	Collector-Emitter Voltage	450	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	22	A
I_B	Base Current-Continuous	5	A
I_{BM}	Base Current-Peak	7.5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	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	1.25	$^\circ\text{C/W}$



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C =50mA; I _B = 0	450			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 50mA; I _C = 0	7			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 8A; I _B = 1.6A I _C = 8A; I _B = 1.6A; T _C = 100°C			1.2 2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 8A; I _B = 1.6A I _C = 8A; I _B = 1.6A; T _C = 100°C			1.3 1.3	V
I _{CER}	Collector Cutoff Current	V _{CE} = V _{CEV} ; R _{BE} = 10 Ω V _{CE} = V _{CEV} ; R _{BE} = 10 Ω; T _C =100°C			0.2 1.5	mA
I _{CEV}	Collector Cutoff Current	V _{CE} = V _{CEV} ; V _{BE} = -1.5V V _{CE} = V _{CEV} ; V _{BE} = -1.5V; T _C =100°C			0.2 1.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			1.0	mA

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