

isc Silicon NPN Power Transistor
BUX88
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 800V(\text{Min})$
- High Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

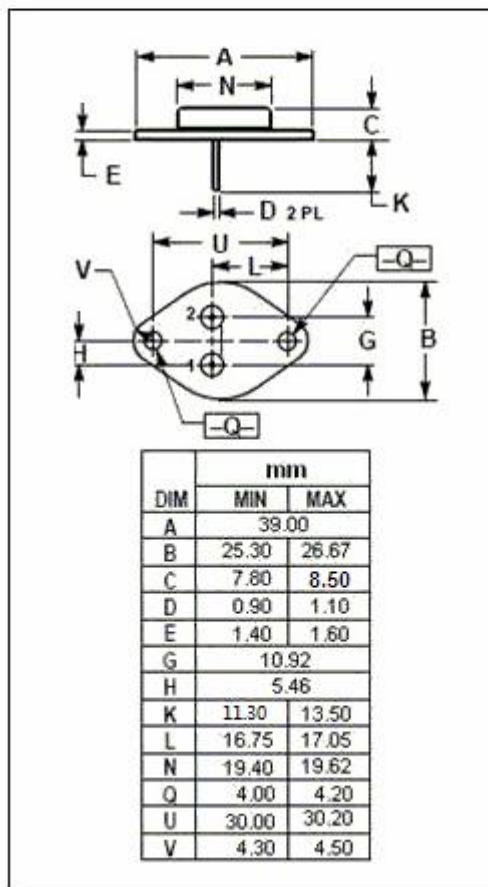
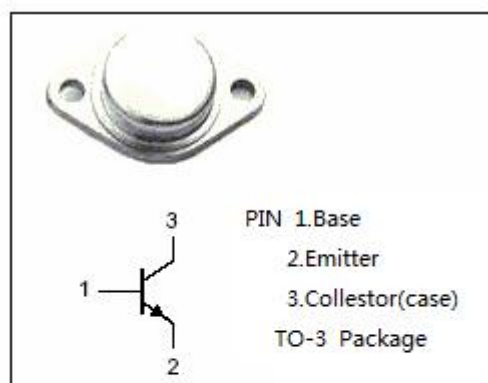
- Designed for use in three-phase AC motor control systems.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage $V_{BE}=0$	1200	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	12	A
I_{CM}	Collector Current-Peak	20	A
I_B	Base Current-Continuous	8	A
I_{BM}	Base Current-Peak	12	A
P_C	Collector Power Dissipation@ $T_C=25^\circ\text{C}$	160	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	0.78	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**BUX88****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	800			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 9A; I _B = 4A			1.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 12A; I _B = 6A			3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 9A; I _B = 4A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1200V; I _E = 0 V _{CB} = 1200V; I _E = 0; T _C = 125°C			1.0 4.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C =0			10	mA
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	6			

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