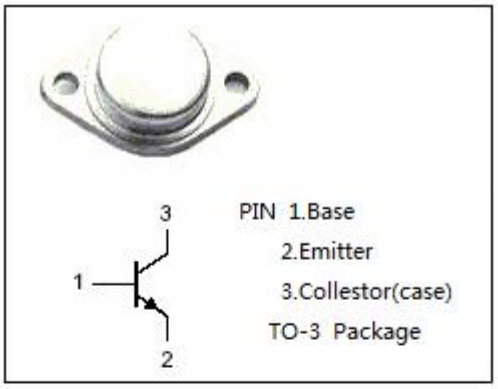
isc Silicon NPN Power Transistor — BUX98A

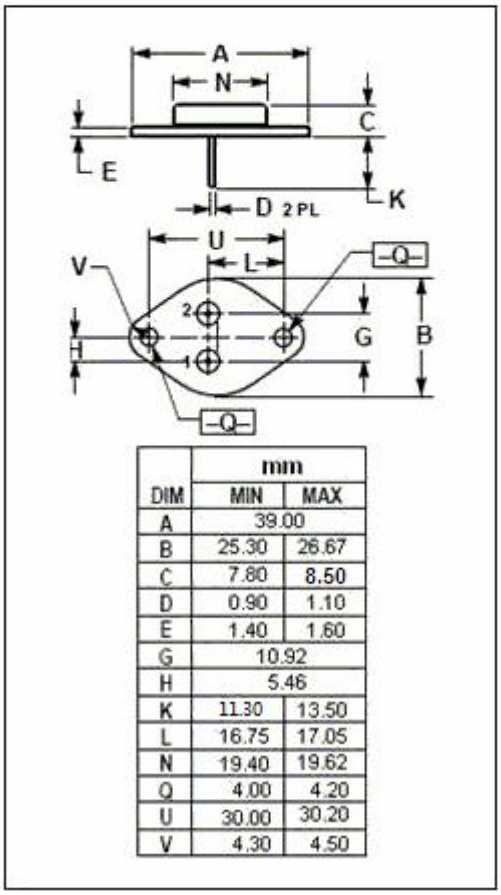
DESCRIPTION

- High Voltage Capability
- High Current Capability
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High frequency and efficiency converters
- Linear and switching industrial equipment





DIM	mm MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1000	V
V_{CEO}	Collector-Emitter Voltage	450	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	30	A
I_{CM}	Collector Current-peak (tp <5 ms)	60	A
I_B	Base Current-Continuous	8	A
I_{BM}	Base Current-peak (tp <5 ms)	30	A
P_C	Collector Power Dissipation @T_C=25℃	250	W
T_j	Junction Temperature	200	℃
T_{stg}	Storage Temperature Range	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	0.7	℃/W

isc Silicon NPN Power Transistor BUX98A

ELECTRICAL CHARACTERISTICS

T_C=25℃ 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
$V_{CER(SUS)}$	Collector-Emitter Sustaining Voltage	I_C= 1mA	1000			V
☆$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 16A ;I_B= 3.2A			1.5	V
☆$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 24A ;I_B= 5A			5.0	V
☆$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 16A ;I_B= 3.2A			1.6	V
I_{CBO}	Collector Cutoff Current	V_{CB}=1000V; I_E= 0 V_{CB}=1000V; I_E= 0 T_C=125℃			0.4 4	mA
I_{CEO}	Collector Cutoff Current	V_{CE}= 450V; I_B= 0			2	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			2	mA
h_{FE}	DC Current Gain	I_C= 1A ; V_{CE}= 5V	15		50	

☆ Pulsed: Pulse duration = 300 ms, duty cycle = 1.5 %