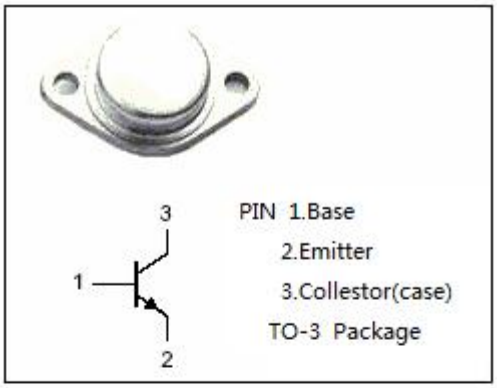
isc Silicon NPN Power Transistor — BUW44

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$= 400V(Min.)
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

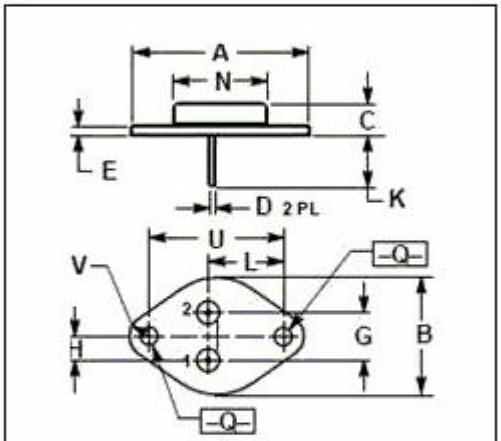


APPLICATIONS

- Intended in fast switching applications for high output powers.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	15	A
I_{CM}	Collector Current-Peak	30	A
I_B	Base Current-Continuous	10	A
P_T	Total Power Dissipation @ T_C≤25℃	175	W
T_J	Junction Temperature	200	℃
T_{stg}	Storage Temperature Range	-65~200	℃



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

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	1.0	℃/W

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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	400			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	I_C= 10A; I_B= 2A			3.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation Voltage	I_C= 6A; I_B= 1A			1.5	V
$V_{BE(sat)-1}$	Base-Emitter Saturation Voltage	I_C= 10A; I_B= 2A			1.8	V
$V_{BE(sat)-2}$	Base-Emitter Saturation Voltage	I_C= 6A; I_B= 1A			1.4	V
I_{EBO}	Emitter cut-off current	V_{EB}=7V; I_C=0			1.0	mA
I_{CES}	Collector Cutoff Current	V_{CE}= 500V;V_{BE}= 0 V_{CE}= 500V;V_{BE}= 0; T_c= 125℃			0.5 3.0	mA
h_{FE}	DC Current Gain	I_C= 6A; V_{CE}= 1.5V	6			