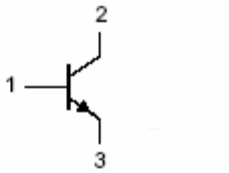
isc Silicon NPN Power Transistors BUW40/A/B

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 300V(Min)- BUW40
  = 350V(Min)- BUW40A
  = 400V(Min)- BUW40B
- High Switching Speed
- High Power Dissipation



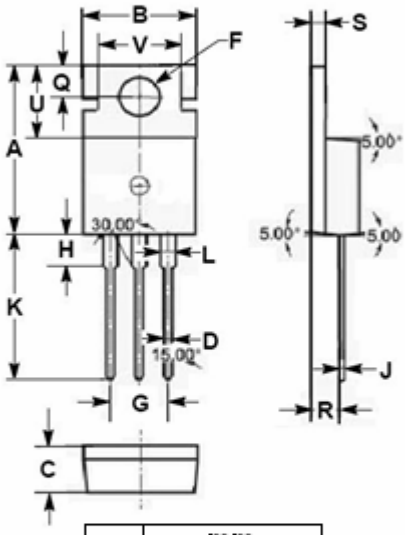
PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package

APPLICATIONS

- Designed for high voltage and switching applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage V_{BE}= -1.5V	BUW40	450	V
		BUW40A	550	
		BUW40B	650	
$V_{CEO(SUS)}$	Collector-Emitter Voltage	BUW40	300	V
		BUW40A	350	
		BUW40B	400	
V_{EBO}	Emitter-Base Voltage		6	V
I_C	Collector Current-Continuous		1	A
I_{CM}	Collector Current-Peak		2	A
P_C	Collector Power Dissipation@T_C=25℃		40	W
T_J	Junction Temperature		150	℃
T_{stg}	Storage Temperature		-65~150	℃



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

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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	BUW40	I_C= 200mA ; I_B= 0	300			V
		BUW40A		350			
		BUW40B		400			
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage		I_E= 1mA ; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage		I_C= 1A; I_B= 0.2A I_C= 1A; I_B= 0.2A,T_C= 150℃			1.0 2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage		I_C= 1A ; V_{CE}= 3V			1.5	V
I_{CEV}	Collector Cutoff Current	BUW40	V_{CE}= 450V;V_{BE}= -1.5V V_{CE}= 450V;V_{BE}= -1.5V,T_C= 150℃			0.1 1.0	mA
		BUW40A	V_{CE}= 550V;V_{BE}= -1.5V V_{CE}= 550V;V_{BE}= -1.5V,T_C= 150℃			0.1 1.0	
		BUW40B	V_{CE}= 650V;V_{BE}= -1.5V V_{CE}= 650V;V_{BE}= -1.5V,T_C= 150℃			0.1 1.0	
I_{EBO}	Emitter Cutoff Current		V_{EB}= 6V; I_C=0			1.0	mA
h_{FE}	DC Current Gain		I_C= 1A ; V_{CE}= 3V	10		50	
f_T	Current-Gain—Bandwidth Product		I_C= 0.5A ;V_{CE}= 10V	10			MHz