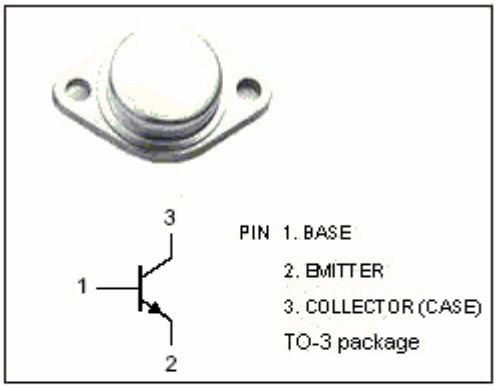
isc Silicon NPN Power Transistors BUX17/A/B/C

DESCRIPTION

- Collector-Emitter Sustaining Voltage-
  : $V_{CEO(SUS)}$ = 150V(Min)- BUX17
  = 250V(Min)- BUX17A
  = 300V(Min)- BUX17B
  = 350V(Min)- BUX17C
- High Switching Speed
- High Power Dissipation

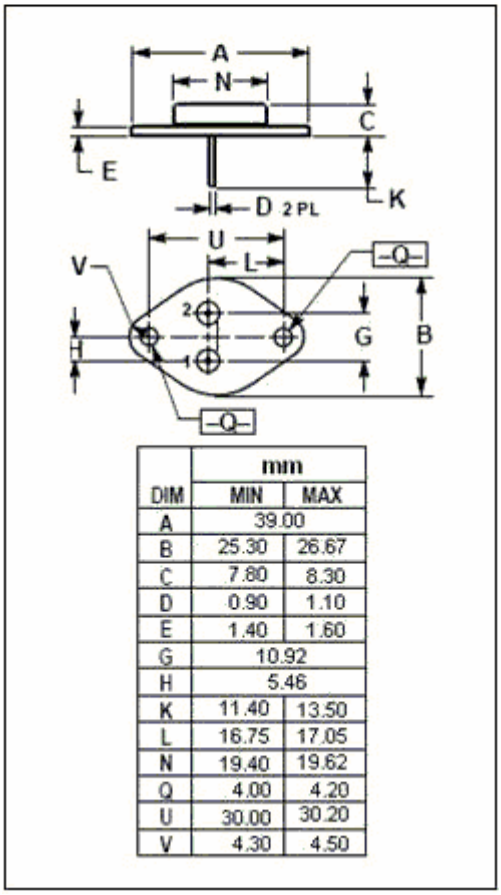


APPLICATIONS

- Designed for use in off-line power supplies and is also well suited for use in a wide range of inverter or converter circuits and pulse-width-modulated regulators.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEV}	Collector-Emitter Voltage V_{BE}= -1.5V	BUX17	250	V
		BUX17A	350	
		BUX17B	400	
		BUX17C	450	
$V_{CEO(SUS)}$	Collector-Emitter Voltage	BUX17	150	V
		BUX17A	250	
		BUX17B	300	
		BUX17C	350	
V_{EBO}	Emitter-Base Voltage		6	V
I_C	Collector Current-Continuous		10	A
I_B	Base Current-Continuous		2	A
P_C	Collector Power Dissipation@T_C=25℃		150	W
T_J	Junction Temperature		200	℃
T_{stg}	Storage Temperature		-65~200	℃



DIM	mm	
	MIN	MAX
A	39.00	
B	25.30	26.67
C	7.80	8.30
D	0.90	1.10
E	1.40	1.60
G	10.92	
H	5.46	
K	11.40	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	1.17	℃/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	BUX17	I_C= 200mA ; I_B= 0	150			V
		BUX17A		250			
		BUX17B		300			
		BUX17C		350			
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage		I_E= 1mA ; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	BUX17/A	I_C= 10A; I_B= 2A			2.0	V
		BUX17B/C	I_C= 8A; I_B= 1.5A			2.0	
$V_{BE(on)}$	Base-Emitter On Voltage	BUX17/A	I_C= 10A ; V_{CE}= 3V			4	V
		BUX17B/C	I_C= 8A ; V_{CE}= 3V			3.5	
I_{CEV}	Collector Cutoff Current	BUX17	V_{CE}= 250V;V_{BE}= -1.5V V_{CE}= 250V;V_{BE}= -1.5V,T_C= 150℃			3 10	mA
		BUX17A	V_{CE}= 350V;V_{BE}= -1.5V V_{CE}= 350V;V_{BE}= -1.5V,T_C= 150℃			3 10	
		BUX17B	V_{CE}= 400V;V_{BE}= -1.5V V_{CE}= 400V;V_{BE}= -1.5V,T_C= 150℃			3 5	
		BUX17C	V_{CE}= 450V;V_{BE}= -1.5V V_{CE}= 450V;V_{BE}= -1.5V,T_C= 150℃			3 5	
I_{EBO}	Emitter Cutoff Current		V_{EB}= 6V; I_C=0			1.0	mA
h_{FE}	DC Current Gain	BUX17/A	I_C= 10A ; V_{CE}= 3V	7			
		BUX17B/C	I_C= 8A ; V_{CE}= 3V				
f_T	Current-Gain—Bandwidth Product		I_C= 0.5A ;V_{CE}= 10V	2.5			MHz