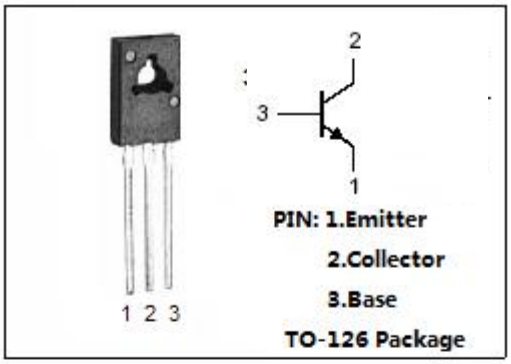
isc Silicon NPN Power Transistor — BUX87

DESCRIPTION

- High Voltage capability
  : $V_{CE(sus)}$= 450V(Min)
- Minimum lot-to-lot spread for reliable operation
- High DC current gain
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

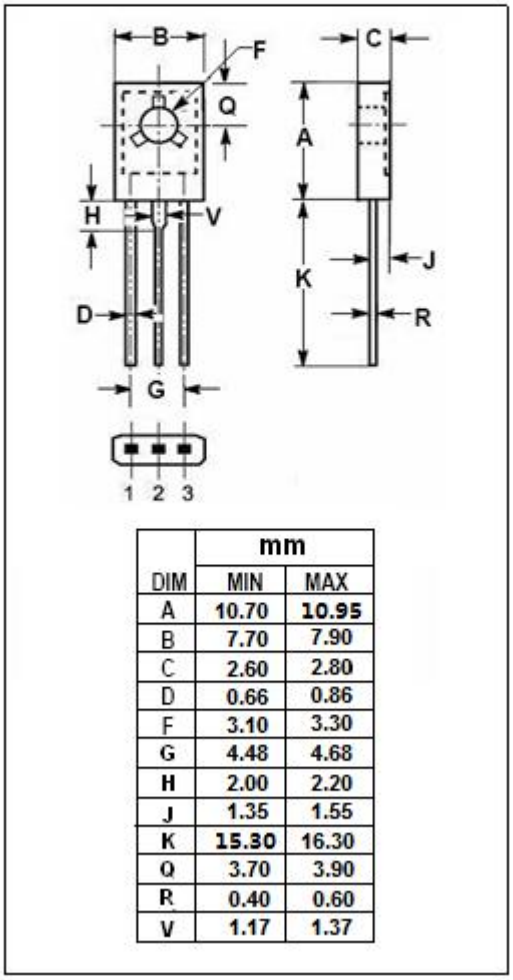


APPLICATIONS

- Fly back and Forward single transistor low Power converters

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	450	V
V_{CEX}	Collector-Emitter Voltage	1000	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	0.5	A
I_{Cm}	Collector Current-Pulse	1	A
Ptot	Total Dissipation at Tc=25℃	40	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃



DIM	mm MIN	MAX
A	10.70	10.95
B	7.70	7.90
C	2.60	2.80
D	0.66	0.86
F	3.10	3.30
G	4.48	4.68
H	2.00	2.20
J	1.35	1.55
K	15.30	16.30
Q	3.70	3.90
R	0.40	0.60
V	1.17	1.37

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	3.12	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance, Junction to Ambient	100	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEO}	Collector-Emitter Voltage	I_C=100mA	450			V
V_{BEO}	Emitter-Base Voltage	I_C=10mA	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.1A; I_B= 0.01A I_C= 0.2A; I_B= 0.02A			0.8 1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 0.2A; I_B= 0.02A			1.0	V
I_{CEV}	Collector Cutoff Current	V_{CE}= 1000V V_{CE}= 1000V Tj=125℃			100 1	μA mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V			1.0	mA
h_{FE}	DC Current Gain	I_C= 50mA， V_{CE}= 5V I_C= 40mA， V_{CE}= 5V	12	50		
f_T	Transition Frequency	I_C= 0.05A ; V_{CE}= 10V,f= 1MHz		20		MHz