

isc Silicon NPN Power Transistor

BUV10

DESCRIPTION

- High Switching Speed
- High Current Capability

APPLICATIONS

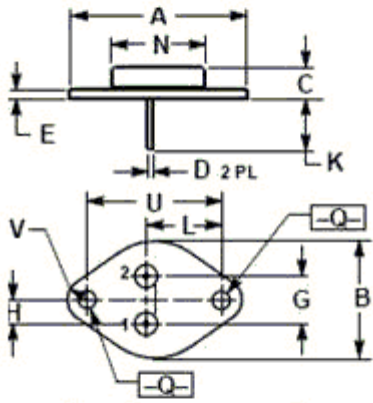
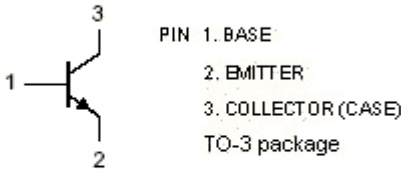
- Designed for high current,high speed,high power applications.

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	160	V
V _{CEX}	Collector-Emitter Voltage V _{BE} = -1.5V	160	V
V _{CER}	Collector-Emitter Voltage R _{BE} = 100 Ω	140	V
V _{CEO}	Collector-Emitter Voltage	125	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current-Continuous	25	A
I _{CM}	Collector Current-Peak	30	A
I _B	Base Current-Continuous	6	A
P _C	Collector Power Dissipation @T _C =25℃	150	W
T _J	Junction Temperature	200	℃
T _{stg}	Storage Temperature Range	-65~200	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	1.0	℃/W



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

ISC Silicon NPN Power Transistor**BUV10****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 0.2A; I _B = 0; L= 25mH	125			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 50mA; I _C = 0	7			V
V _{CE(sat)} -1	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1A			1.0	V
V _{CE(sat)} -2	Collector-Emitter Saturation Voltage	I _C = 20A ; I _B = 2A			2.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 1A			1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 100V; I _B = 0			1.5	mA
I _{CEX}	Collector Cutoff Current	V _{CE} = 160V; V _{BE} = -1.5V V _{CE} = 160V; V _{BE} = -1.5V; T _C =125°C			1.5 6.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0			0.5	mA
h _{FE-1}	DC Current Gain	I _C = 10A ; V _{CE} = 4V	20		60	
h _{FE-2}	DC Current Gain	I _C = 20A ; V _{CE} = 4V	10			
f _T	Current-Gain—Bandwidth Product	I _C = 1A; V _{CE} = 15V	8			MHz