

isc Silicon NPN Power Transistor

BUV48

DESCRIPTION

- High Voltage Capability
- High Current Capability
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

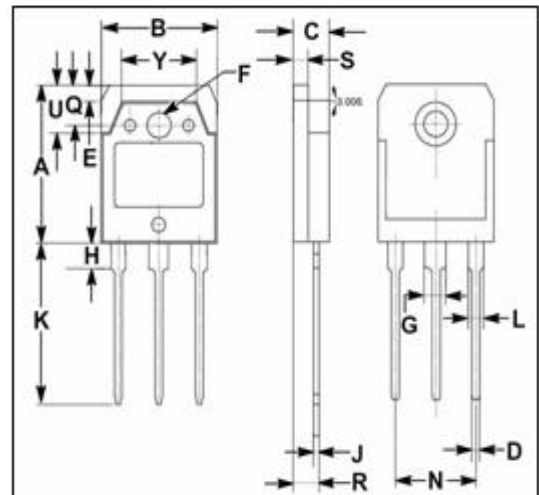
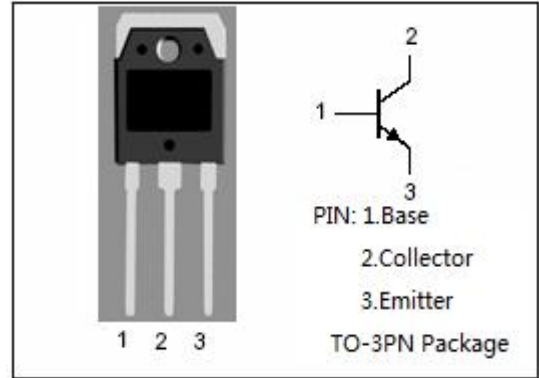
- Switching regulators
- Inverters
- Solenoid and relay drivers
- Motor controls
- Deflection circuits

Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	850	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	5	A
I _{BM}	Base Current-peak	20	A
P _C	Collector Power Dissipation @T _c =25°C	150	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

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



DIM	mm	
	MIN	MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ; I _B = 0	400		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 = 2A I _C = 10A; I _B = 2A; T _C = 100°C		1.5 2.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 15A ; I _B = 3A		5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 2A I _C = 10A; I _B = 2A; T _C = 100°C		1.6 1.6	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 850V ; I _B = 0		0.2	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		0.1	mA
h _{FE}	DC Current Gain	I _C = 10A ; V _{CE} = 5V	8		

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