

isc Silicon NPN Power Transistor
BUP49
DESCRIPTION

- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

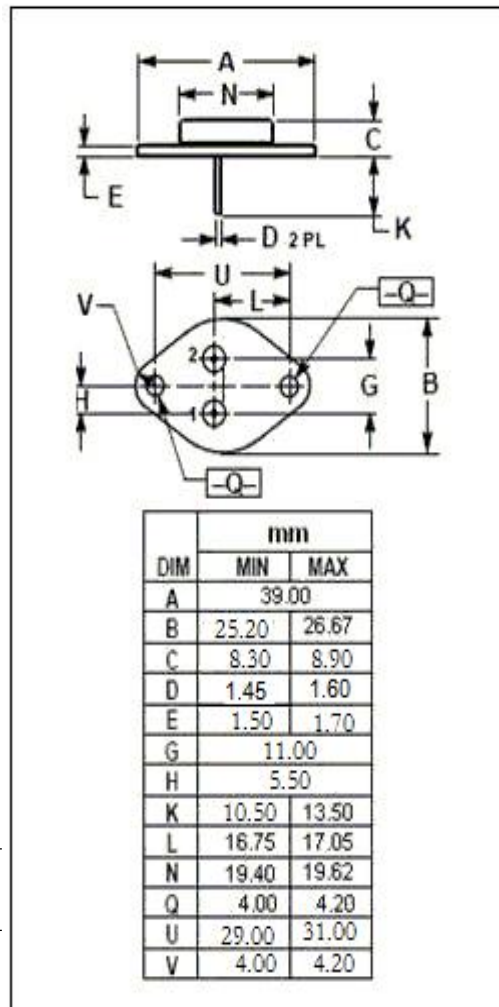
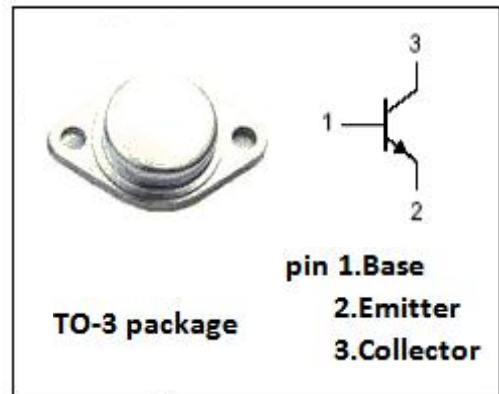
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	150	V
V _{CEO}	Collector-Emitter Voltage	80	V
V _{EBO}	Emitter-Base Voltage	8	V
I _C	Collector Current-Continuous	90	A
P _C	Collector Power Dissipation	300	W
T _J	Junction Temperature	-55~200	°C
T _{stg}	Storage Temperature	-55~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.58	°C/W



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ELECTRICAL CHARACTERISTICS

T_C=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 30mA; I _B = 0	80		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	150		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA; I _C = 0	8		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 35A; I _B = 2A		1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 35A; I _B = 2A		1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 80V; I _B =0		0.1	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 150V; I _E =0		0.1	mA
h _{FE-1}	DC Current Gain	I _C = 80A; V _{CE} = 4V	15		

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