

isc Silicon NPN Power Transistor
BUF420M
DESCRIPTION

- With TO-3 packaging
- Large collector current
- Low collector saturation voltage
- High power dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

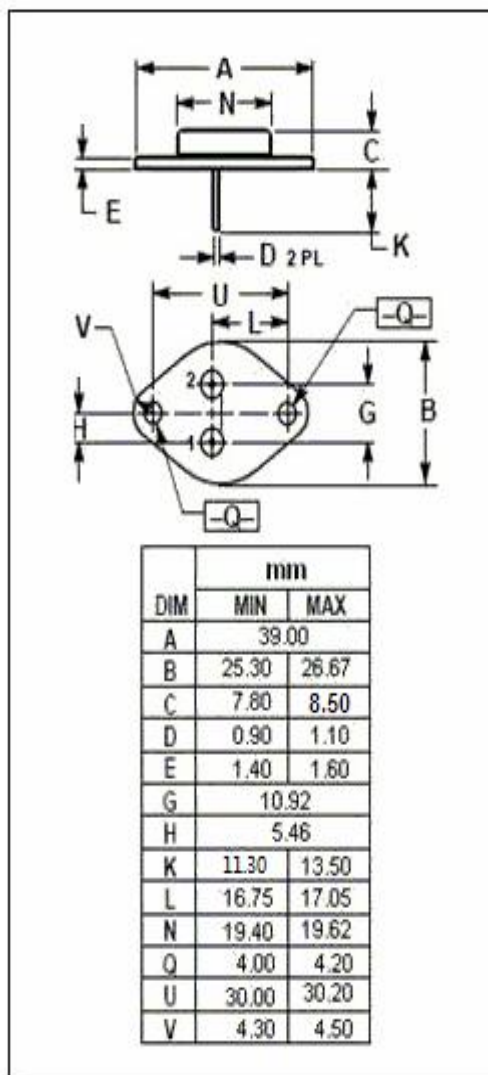
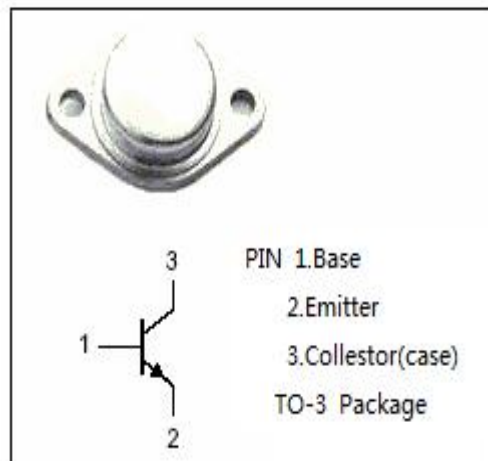
- Designed for use in DC-DC converter
- Driver of solenoid or motor
- For audio amplifier applications

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	850	V
V _{CEO}	Collector-Emitter Voltage	450	V
V _{EBO}	Emitter-Base Voltage	7	V
I _C	Collector Current-Continuous	30	A
I _{CM}	Peak Collector Current	60	A
I _B	Base Current	6	A
P _C	Collector Power Dissipation	200	W
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	0.63	°C/W



isc Silicon NPN Power Transistors

BUV62A

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	450		V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 10mA; I _E = 0	850		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 10mA; I _C = 0	7		V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 1A		2.8	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 20A; I _B = 2A		2	V
V _{BE(sat)-1}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 1A		1.5	V
V _{BE(sat)-2}	Base-Emitter Saturation Voltage	I _C = 20A; I _B = 2A		1.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = 450V; I _B =0		0.2	mA
I _{CBO}	Collector Cutoff Current	V _{CB} = 850V; I _E =0		0.2	mA
h _{FE}	DC Current Gain	I _C = 1A; V _{CE} = 5V	10	40	

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