

isc Silicon NPN Power Transistor

BUX64

DESCRIPTION

- High Collector-Emitter Sustaining Voltage-
:V_{CEO(SUS)}= 400V(Min.)
- Fast Switching Speed
- High Reliability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

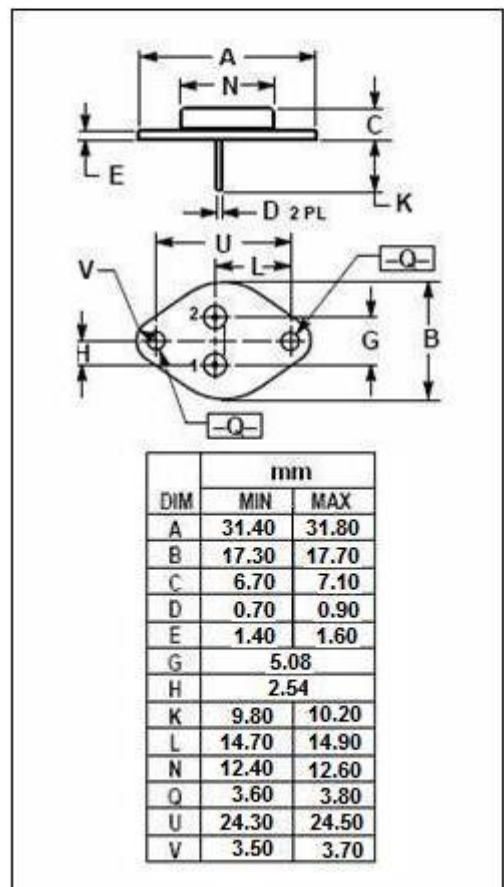
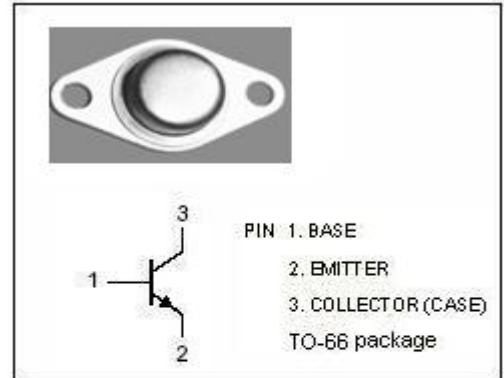
- Designed for use in high frequency and efficiency converters,switching regulators and motor control

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	450	V
V _{CEO}	Collector-Emitter Voltage	400	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	4	A
P _C	Collector Power Dissipation@T _C =25°C	70	W
T _J	Junction Temperature	200	°C
T _{stg}	Storage Temperature	-65~200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance,Junction to Case	3.0	°C/W



isc Silicon NPN Power Transistor**BUX64****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; I _B = 0	400			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 0.1mA; I _E = 0	450			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 0.1mA; I _C = 0	6			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			0.8	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 0.4A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A; I _B = 0.4A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 450V; I _E = 0			100	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			100	μ A
h _{FE}	DC Current Gain	I _C = 1.5A; V _{CE} = 4V	20		60	
f _T	Current-Gain—Bandwidth Product	I _C =0.5A; V _{CE} =10V	8			MHz

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