

isc Silicon PNP Power Transistor
BUX78A
DESCRIPTION

- Continuous Collector Current- $I_C = -8A$
- Collector Power Dissipation-
: $P_C = 50W @ T_C = 25^\circ C$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = -80V(\text{Min})$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

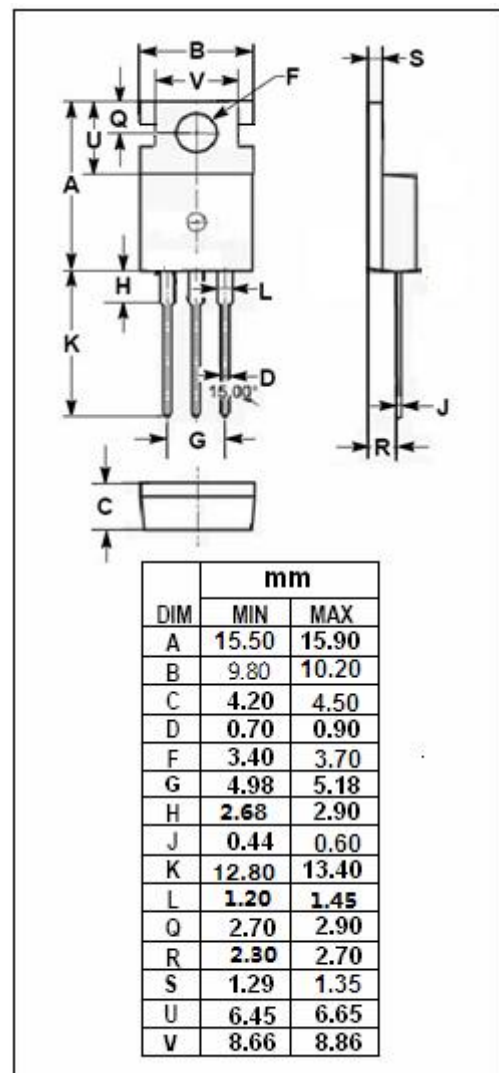
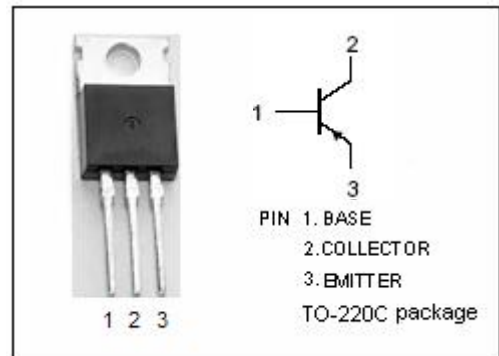
- Designed for use in switching regulators and general purpose power amplifiers.

ABSOLUTE MAXIMUM RATINGS($T_a = 25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current-Continuous	-8	A
I_B	Base Current-Continuous	-2	A
P_C	Collector Power Dissipation@ $T_C = 25^\circ C$	50	W
T_J	Junction Temperature	200	$^\circ C$
T_{stg}	Storage Temperature	-65~175	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ C/W$



isc Silicon PNP Power Transistor**BUX78A****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	-80		V
V _{CES}	Collector-Emitter Voltage	I _C = -2mA; V _{BE} = 0	-100		V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -1mA; I _C = 0	-6		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -0.5A		-1.0	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -5A; I _B = -0.5A		-1.3	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -60V; I _B = 0		-10	μ A
I _{CBO}	Collector Cutoff Current	V _{CB} = -80V; I _E = 0 V _{CB} = -80V; I _E = 0, T _C =150°C		-0.5 -150	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V; I _C = 0		-0.5	μ A
h _{FE-1}	DC Current Gain	I _C = -0.5A; V _{CE} = -5V	70		
h _{FE-2}	DC Current Gain	I _C = -2A; V _{CE} = -5V	50		120
h _{FE-3}	DC Current Gain	I _C = -5A; V _{CE} = -5V	30		
h _{FE-4}	DC Current Gain	I _C = -1A; V _{CE} = -5V; T _C = -40°C	25		

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