

isc Silicon NPN Power Transistor
BUW73
DESCRIPTION

- Collector-Emitter Sustaining Voltage-
: $V_{CE(SUS)} = 200V(\text{Min.})$
- Low Collector Saturation Voltage-
: $V_{CE(sat)} = 1.5V(\text{Max.}) @ I_C = 12A$
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

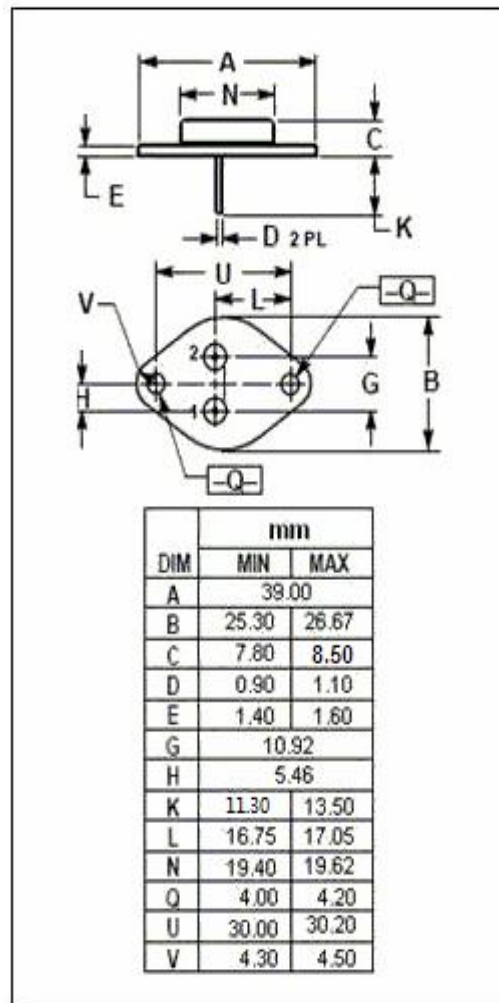
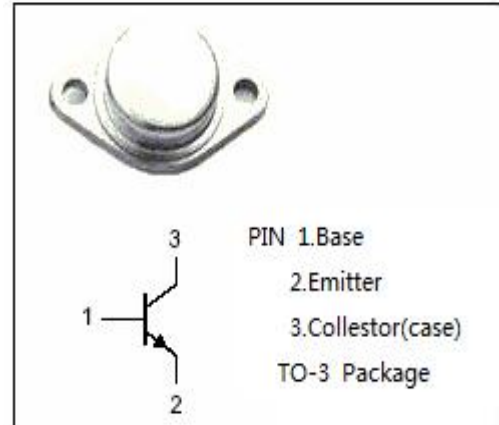
- Designed for high current, high speed, high power applications.

Absolute maximum ratings($T_a = 25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CES}	Collector-Emitter Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	20	A
I_{CM}	Collector Current-Peak	25	A
I_B	Base Current-Continuous	4	A
I_{BM}	Base Current-peak	6	A
P_C	Collector Power Dissipation @ $T_c = 25^\circ\text{C}$	120	W
T_j	Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.25	$^\circ\text{C}/\text{W}$



isc Silicon NPN Power Transistor**BUW73****ELECTRICAL CHARACTERISTICS**T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	200			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = 15A; I _B = 1.5A			3.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	I _C = 12A; I _B = 1.2A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 12A; I _B = 1.2A			1.5	V
I _{CBO}	Collector –Base Cutoff Current	V _{CB} = 300V; I _E =0 V _{CB} = 300V; I _E =0; T _C =125°C			1.0 10	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 7V; I _C = 0			5.0	mA

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