

isc Silicon NPN Power Transistor

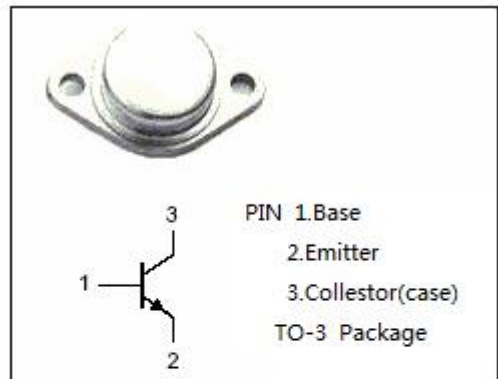
BUW24

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 350V(\text{Min.})$
- High Speed Switching
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

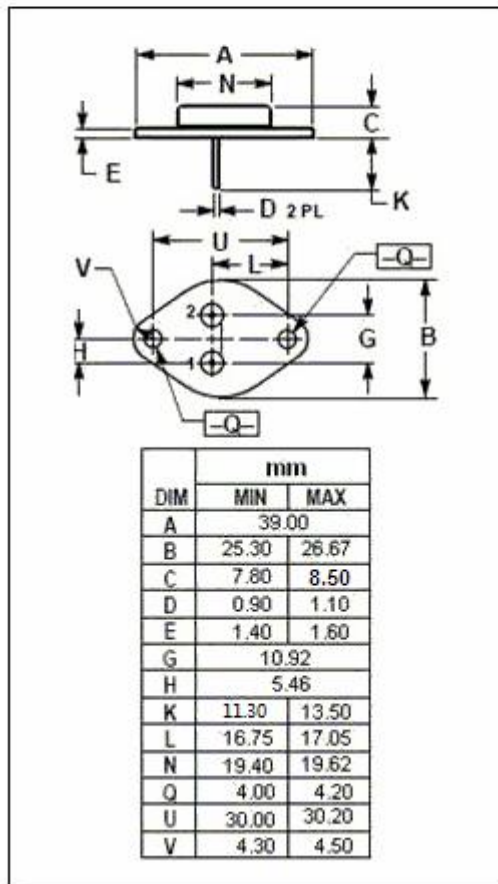
APPLICATIONS

- Designed for use in switching mode power supply.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	450	V
V_{CEO}	Collector-Emitter Voltage	350	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	10	A
I_B	Base Current-Continuous	3	A
P_T	Total Power Dissipation @ $T_c \leq 25^\circ\text{C}$	100	W
T_J	Junction Temperature	200	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~200	$^\circ\text{C}$



THERMAL CHARACTERISTICS

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

isc Silicon NPN Power Transistor**BUW24****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	350			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.5A			1.2	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2.5A; I _B = 0.5A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 450V; I _E = 0			0.1	mA
I _{EBO}	Emitter Cutoff current	V _{EB} =7V; I _C = 0			0.1	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	10		80	
h _{FE-2}	DC Current Gain	I _C = 4A; V _{CE} = 5V	15			

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