

Silicon NPN Power Transistors

BUW35

DESCRIPTION

- With TO-3 package
- High breakdown voltage

APPLICATIONS

- For high voltage ,fast switching applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



Fig.1 simplified outline (TO-3) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	800	V
V_{CEO}	Collector-emitter voltage	Open base	400	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_{CM}	Collector current-peak		15	A
I_B	Base current		5	A
P_T	Total power dissipation	$T_C \leq 25^\circ\text{C}$	125	W
T_j	Junction temperature		200	$^\circ\text{C}$
T_{stg}	Storage temperature		-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-c}$	Thermal resistance from junction to case	1.4	$^\circ\text{C}/\text{W}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

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SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	$I_C=100mA$; $I_B=0$	400			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=8A$; $I_B=2.5A$			1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=8A$; $I_B=2.5A$			1.8	V
I_{CES}	Collector cut-off current	$V_{CE}=800V$; $V_{BE}=0$ $T_C=125^\circ C$			0.1 3.0	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=7V$; $I_C=0$			1	mA
h_{FE-1}	DC current gain	$I_C=1A$; $V_{CE}=5V$	15		50	
h_{FE-2}	DC current gain	$I_C=5A$; $V_{CE}=5V$	8			

Switching times

t_{on}	Turn-on time	$I_C=5A$; $I_{B1}=-I_{B2}=1A$ $V_{CC}=250V$			0.7	μs
t_s	Storage time				3.0	μs
t_f	Fall time				0.8	μs

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PACKAGE OUTLINE

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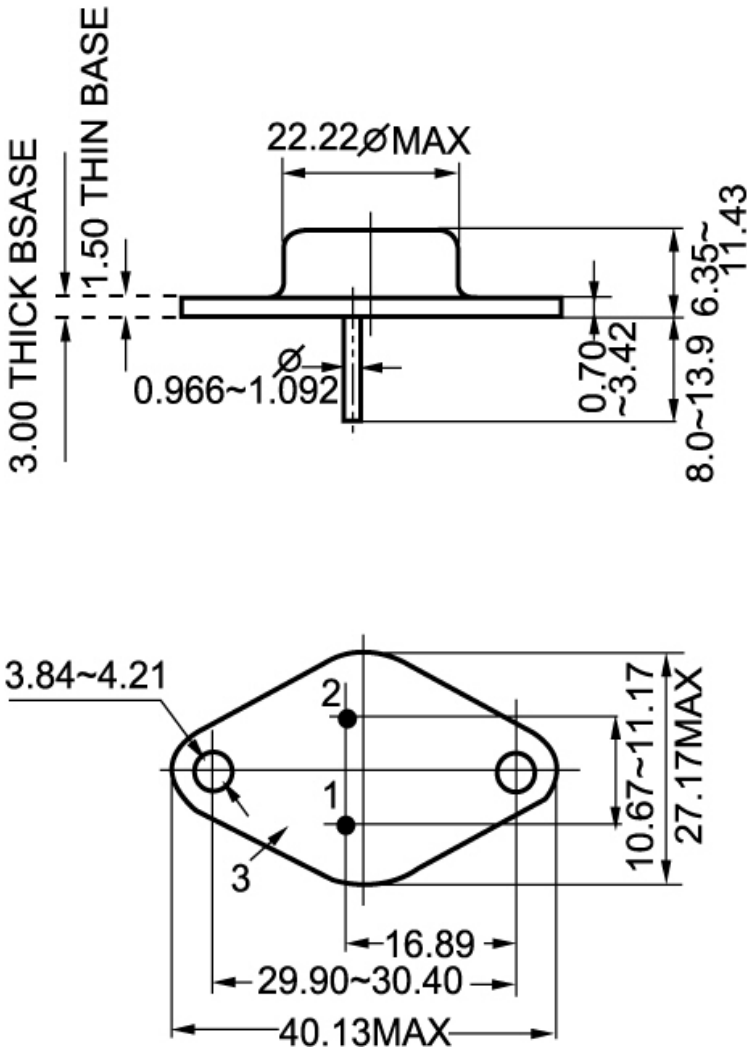


Fig.2 Outline dimensions