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Silicon NPN Power Transistors — BUW36

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(Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	900	V
V_{CEO}	Collector-emitter voltage	Open base	450	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 25	125	W
T_j	Junction temperature		200	
T_{stg}	Storage temperature		-65~200	

THERMAL CHARACTERISTICS

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

CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=100mA : I_B=0	450			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=8A; I_B=2.5A			3.0	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}=900V ;V_{BE}=0 T_C=125			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	s
t_s	Storage time				3.0	s
t_f	Fall time				0.8	s

PACKAGE OUTLINE

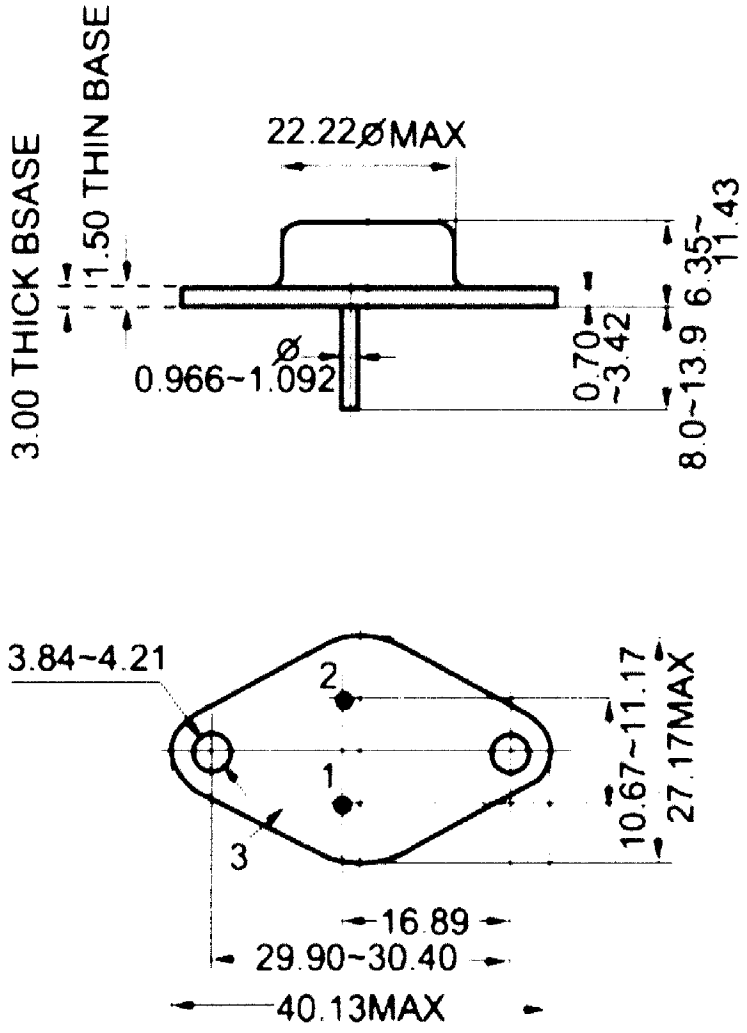

Fig.2 Outline dimensions