

Silicon NPN Power Transistors

BU133

DESCRIPTION

- With TO-3 package
- High voltage ,high speed

APPLICATIONS

- Intended for operating in color TV receiver's chopper supplies

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector



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

Absolute maximum ratings($T_a = \square$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_{CBO}	Collector-base voltage	Open emitter	750	V
V_{CEO}	Collector-emitter voltage	Open base	250	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		3	A
P_T	Total power dissipation	$T_C = 50 \square$	30	W
T_j	Junction temperature		200	$\square$
T_{stg}	Storage temperature		-65~200	$\square$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-mb}$	Thermal resistance from junction to mounting base	2.33	$\square/W$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =0.1A ; I _B =0	250			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10mA ; I _C =0	7			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =2A; I _B =0.5A			1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =2A; I _B =0.5A			1.4	V
I _{CBO}	Collector cut-off current	V _{CB} =750V; I _E =0			0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =7V; I _C =0			0.1	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	15		80	
f _T	Transition frequency	I _C =0.2A ; V _{CE} =10V		8		MHz

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PACKAGE OUTLINE

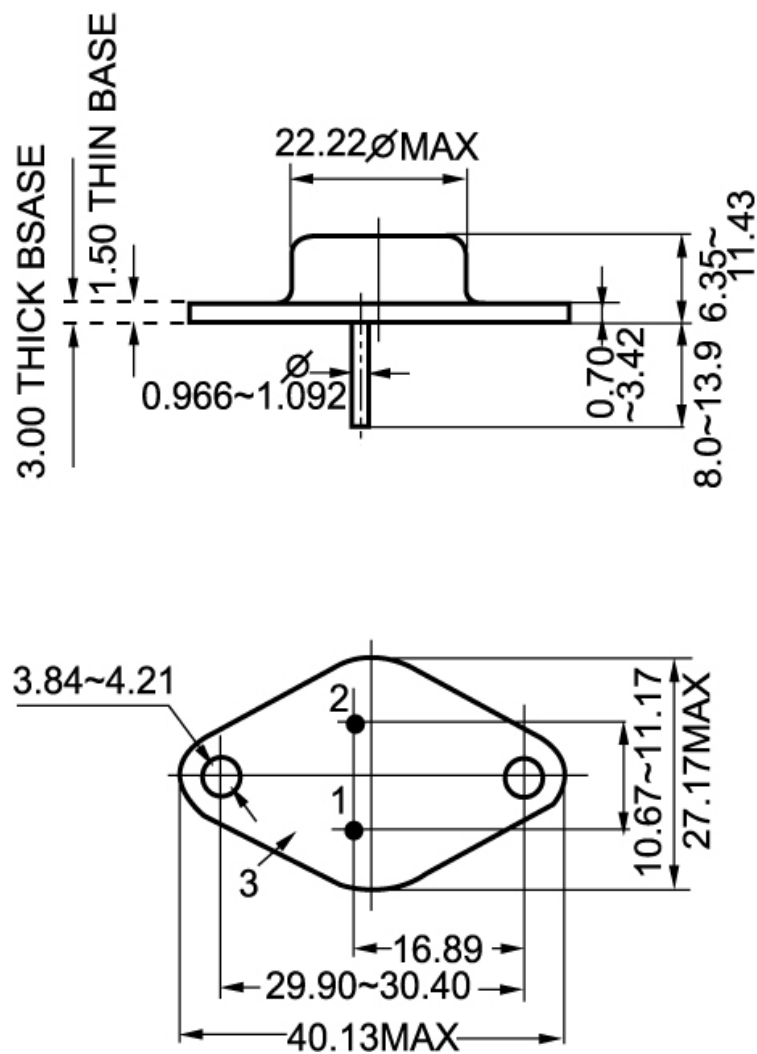


Fig.2 Outline dimensions