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(Ta=℃)

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℃	30	W
T_j	Junction temperature		200	℃
T_{stg}	Storage temperature		-65~200	℃

THERMAL CHARACTERISTICS

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

Silicon NPN Power Transistors BU133

CHARACTERISTICS

Tj=25℃ 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

Silicon NPN Power Transistors BU133

PACKAGE OUTLINE

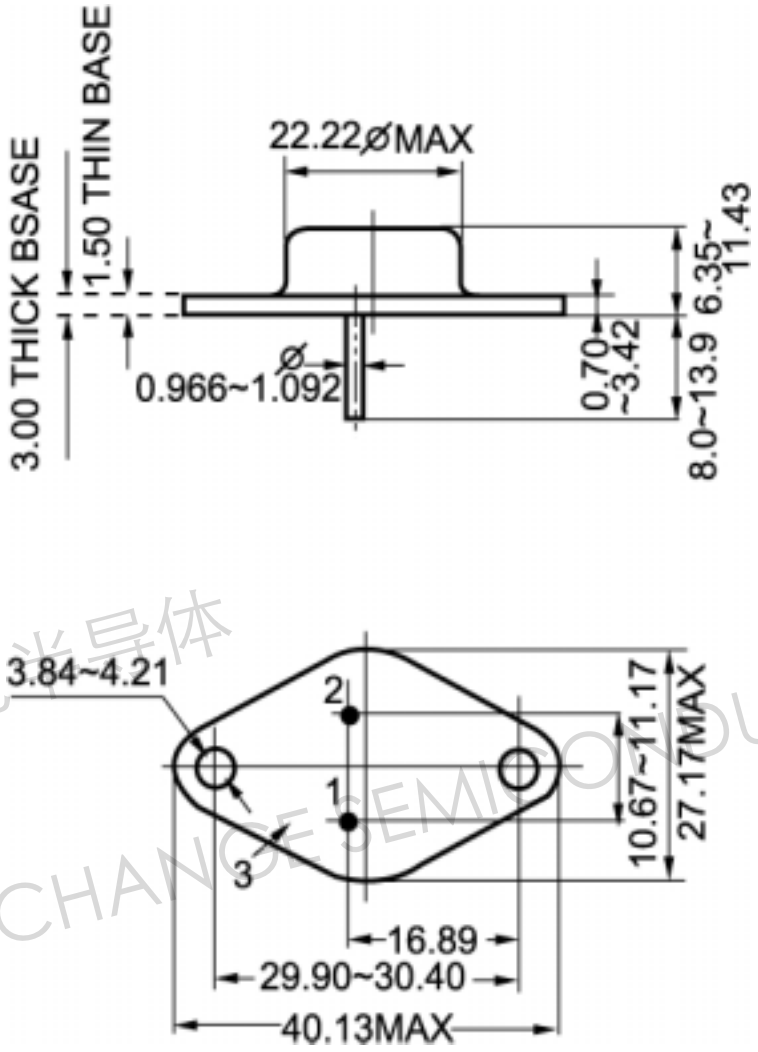

Fig.2 Outline dimensions