

**BUV22**

Silicon NPN Transistors



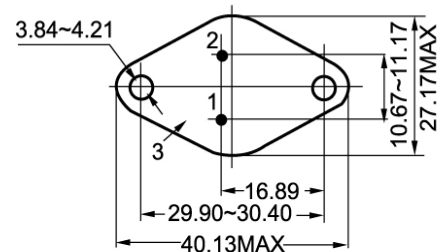
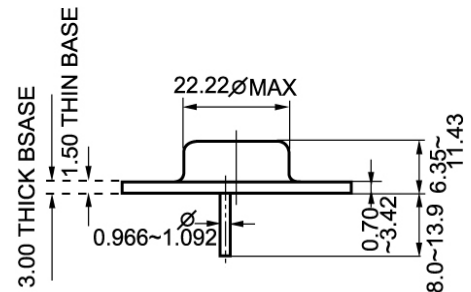
1B 2E 3C

◆ **Features**

- Designed for high speed and high current power applications.
- With TO-3 package

◆ **Absolute Maximum Ratings Tc=25°C**

SYMBOL	PARAMETER	RATING	UNIT
V <sub>CB0</sub>	Collector to base voltage	300	V
V <sub>CEO</sub>	Collector to emitter voltage	250	V
V <sub>EBO</sub>	Emitter to base voltage	7.0	V
I <sub>B</sub>	Base Current	8	A
I <sub>C</sub>	Collector current-Continuous	40	A
P <sub>D</sub>	Total Power Dissipation@TC=25°C	250	W
T <sub>j</sub>	Junction temperature	200	°C
T <sub>stg</sub>	Storage temperature	-65~+200	°C



TO-3

◆ **Electrical Characteristics Tc=25°C**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> =300V; I <sub>E</sub> =0		3.0	mA
I <sub>EBO</sub>	Emitter Cut-off Current	V <sub>EB</sub> =5V; I <sub>C</sub> =0		1.0	mA
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> =200V; I <sub>B</sub> =0		3.0	mA
V <sub>CB0</sub>	Collector-base breakdown voltage				
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =100mA; I <sub>B</sub> =0	250		V
V <sub>EBO</sub>	Emitter-base breakdown voltages	I <sub>E</sub> =50mA; I <sub>C</sub> =0	7		V
V <sub>CE(sat-1)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =10A; I <sub>B</sub> =1A		1.0	V
V <sub>CE(sat-2)</sub>	Collector-emitter saturation voltages	I <sub>C</sub> =20A; I <sub>B</sub> =2.5A		1.5	V
V <sub>CE(sat-3)</sub>	Collector-emitter saturation voltages				
h <sub>FE-1</sub>	Forward current transfer ratio	I <sub>C</sub> =10A; V <sub>CE</sub> =4V	20	60	
h <sub>FE-2</sub>	Forward current transfer ratio	I <sub>C</sub> =20A; V <sub>CE</sub> =4V	10		
V <sub>BE(sat-1)</sub>	Base-emitter saturation voltages	I <sub>C</sub> =40A; I <sub>B</sub> =4A		1.5	V
V <sub>BE(sat-2)</sub>	Base-emitter saturation voltages				
f <sub>T</sub>	Transition frequency at f=1MHz	I <sub>C</sub> =2A; V <sub>CE</sub> =15V f=4MHz	8.0		MHZ