

Silicon NPN Power Transistors

BUV70

DESCRIPTION

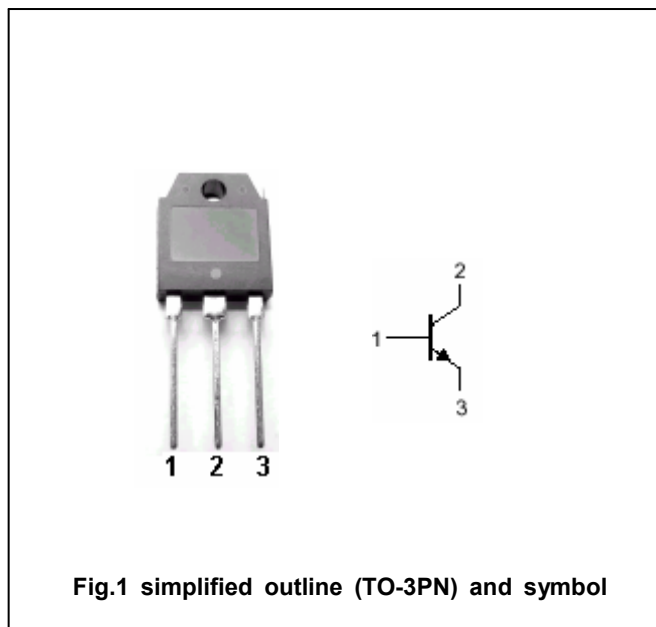
- With TO-3PN package
- High breakdown voltage
- Fast switching speed
- Wide area of safe operation

APPLICATIONS

- For switching regulator applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1300	V
V_{CEO}	Collector-emitter voltage	Open base	550	V
V_{EBO}	Emitter-base voltage	Open collector	7	V
I_C	Collector current		10	A
I_B	Base current		4	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	140	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon NPN Power Transistors

BUV70

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=5mA ; I_B=0$	550			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA ; I_C=0$	7			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=6A ; I_B=1.2A$			2.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=6A ; I_B=1.2A$			1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=500V ; I_E=0$			10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V ; I_C=0$			10	μA
h_{FE}	DC current gain	$I_C=3.2A ; V_{CE}=2V$	5			
f_T	Transition frequency	$I_C=0.5A ; V_{CE}=10V$		9		MHz

Silicon NPN Power Transistors

BUV70

PACKAGE OUTLINE

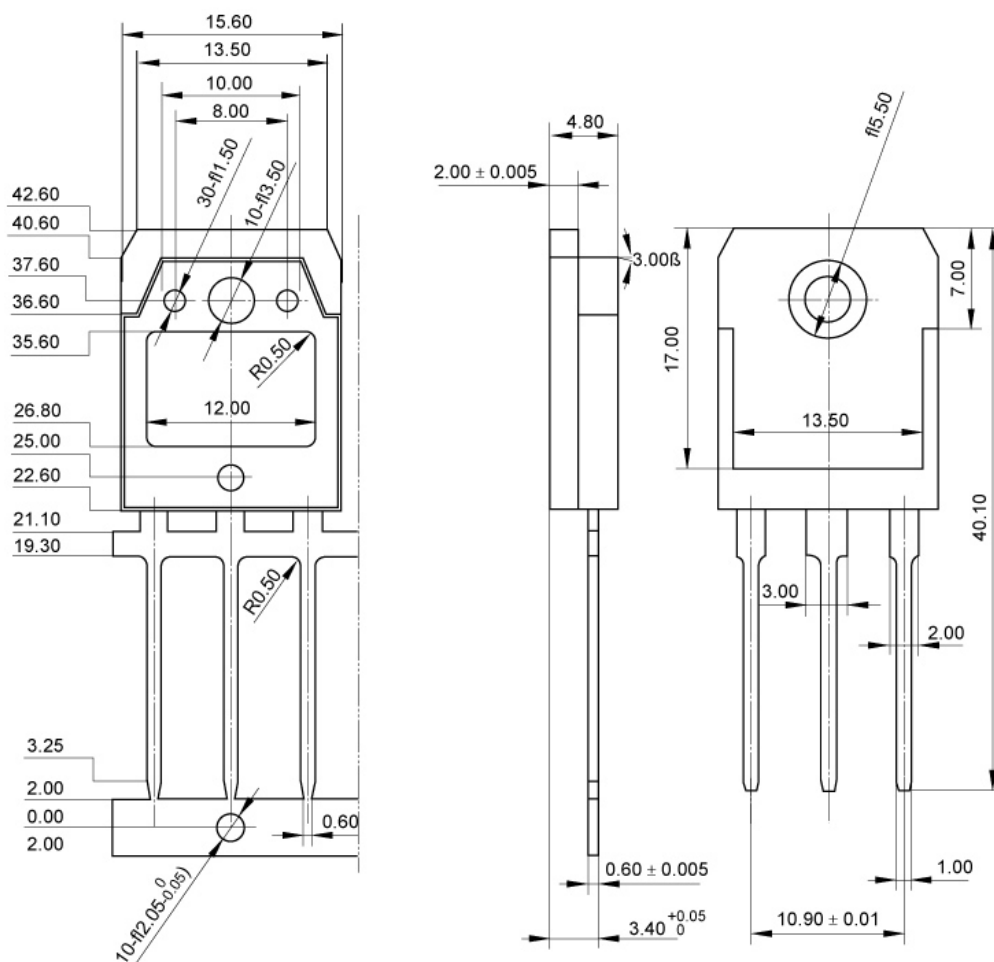


Fig.2 outline dimensions