

Silicon PNP Power Transistors

2SB1490

DESCRIPTION

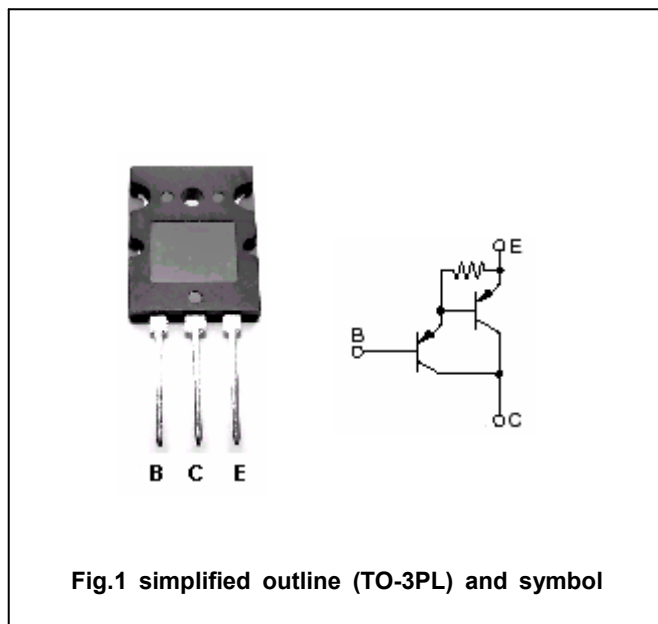
- With TO-3PL package
- Complement to type 2SD2250
- High DC current gain
- Low collector saturation voltage
- DARLINGTON

APPLICATIONS

- For power amplification
- Optimum for HiFi output 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	-160	V
V_{CEO}	Collector-emitter voltage	Open base	-140	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-7	A
I_{CM}	Collector current-peak		-12	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	90	W
		$T_a=25^\circ\text{C}$	3.5	
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-30mA ; I_B=0$	-140			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-6A ; I_B=-6mA$			-2.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-6A ; I_B=-6mA$			-3.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-160V ; I_E=0$			-100	μA
I_{CEO}	Collector cut-off current	$V_{CE}=-140V ; I_B=0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V ; I_C=0$			-100	μA
h_{FE-1}	DC current gain	$I_C=-1A ; V_{CE}=-5V$	2000			
h_{FE-2}	DC current gain	$I_C=-6A ; V_{CE}=-5V$	5000		30000	
f_T	Transition frequency	$I_C=-0.5A ; V_{CE}=-10V ; f=1MHz$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C=-6A ; I_{B1}=-I_{B2}=-6mA$ $V_{CC}=-50V$		1.0		μs
t_s	Storage time			1.5		μs
t_f	Fall time			1.2		μs

◆ h_{FE-2} classifications

Q	P
5000-150000	8000-30000

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PACKAGE OUTLINE

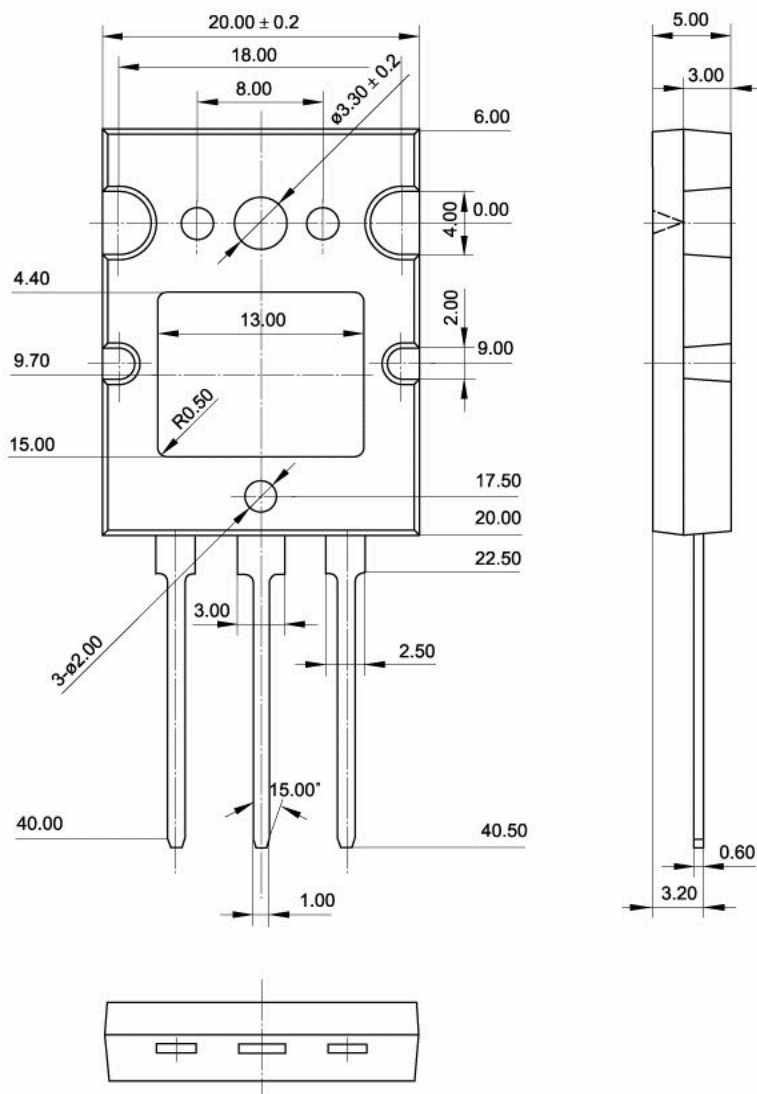


Fig.2 Outline dimensions (unindicated tolerance:±0.50 mm)