

Silicon PNP Power Transistors

2SB747

DESCRIPTION

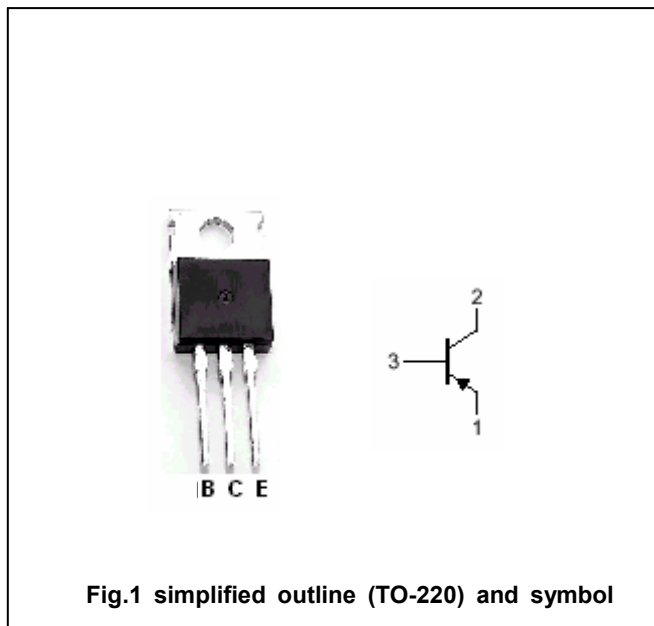
- With TO-220C package
- Complement to type 2SD812
- Wide area of safe operation

APPLICATIONS

- High power amplifier applications
- Suitable for 15~20W home stereo output amplifier and voltage regulator

PINNING

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

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-80	V
V_{CEO}	Collector-emitter voltage	Open base	-80	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-5	A
I_{CM}	Collector current-peak		-8	A
P_C	Collector dissipation	$T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-50~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.3A			-2.0	V
V _{BE}	Base-emitter on voltage	I _C =-3A; V _{CE} =-5V			-1.8	V
I _{CBO}	Collector cut-off current	V _{CB} =-80V; I _E =0			-50	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-3V; I _C =0			-50	μA
h _{FE-1}	DC current gain	I _C =-20mA; V _{CE} =-5V	20			
h _{FE-2}	DC current gain	I _C =-1A; V _{CE} =-5V	40		200	
h _{FE-3}	DC current gain	I _C =-3A; V _{CE} =-5V	20			
C _{OB}	Output capacitance	I _E =0; V _{CB} =-10V; f=1MHz		190		pF
f _T	Transition frequency	I _C =-0.5A; V _{CE} =-5V		7		MHz

◆ h_{FE-2} Classifications

R	Q	P
40-80	60-120	100-200

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PACKAGE OUTLINE

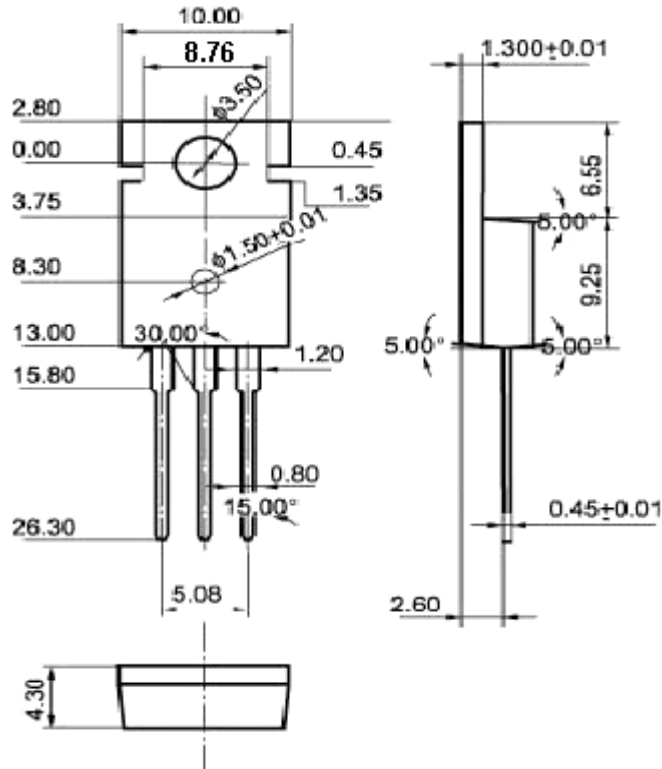


Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)