

Silicon PNP Power Transistors

2SA748

DESCRIPTION

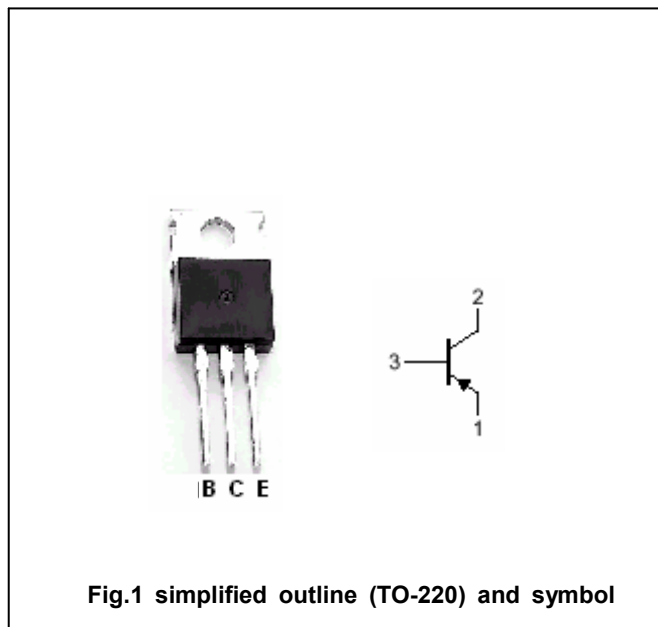
- With TO-220 package
- Complement to type 2SC1398
- Large collector power dissipation

APPLICATIONS

- For medium power amplifier applications

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	-70	V
V_{CEO}	Collector-emitter voltage	Open base	-50	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-2	A
I_{CM}	Collector current-peak		-3	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	15	W
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	$I_C=-10mA, I_B=0$	-50			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-1mA, I_E=0$	-70			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-1A; I_B=-0.1A$		-0.6	-1.0	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-2A; I_B=-0.2A$		-1.0	-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-40V; I_E=0$			-1	μA
I_{CEO}	Collector cut-off current	$V_{CE}=-20V; I_B=0$			-100	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V; I_C=0$			-100	μA
h_{FE-1}	DC current gain	$I_C=-0.1A; V_{CE}=-5V$	30			
h_{FE-2}	DC current gain	$I_C=-1A; V_{CE}=-5V$	50		220	
f_T	Transition frequency	$I_C=0.5A; V_{CE}=-5V$		120		MHz

◆ h_{FE-2} Classifications

P	Q	R
50-100	80-160	120-220

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PACKAGE OUTLINE

Fig.2 Outline dimensions(unindicated tolerance: ± 0.10 mm)