

Silicon NPN Power Transistors

2SD748 2SD748A

DESCRIPTION

- With TO-3 package
- High V_{CBO}
- High power dissipation

APPLICATIONS

- Low frequency power amplifier regulator for TV power supply applications

PINNING(see Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

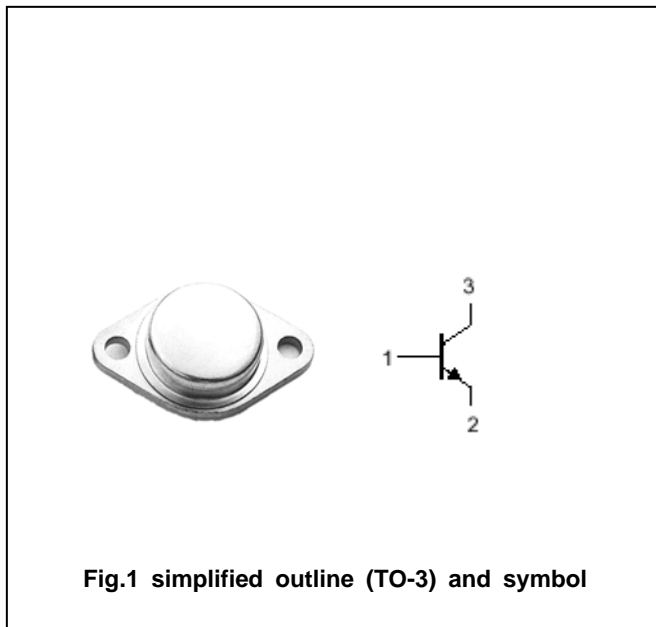


Fig.1 simplified outline (TO-3) and symbol

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	250	V
V_{CEO}	Collector-emitter voltage	2SD748	200	V
		2SD748A	250	
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		3	A
I_B	Base current		1	A
P_C	Collector power dissipation	$T_C=25^{\circ}C$	80	W
T_j	Junction temperature		150	$^{\circ}C$
T_{stg}	Storage temperature		-45~150	$^{\circ}C$

Silicon NPN Power Transistors

2SD748 2SD748A

CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	2SD748	I _C =10mA ; R _{BE} =∞			V
		2SD748A				
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =5mA ; I _C =0	5			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =3A ; I _B =0.6A			1.0	V
V _{BE}	Base-emitter on voltage	I _C =1A ; V _{CE} =5V			1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =200V ; I _E =0			1.0	mA
I _{EBO}	Emitter cut-off current	V _{EB} =5V ; I _C =0			1.0	mA
h _{FE}	DC current gain	I _C =1A ; V _{CE} =5V	25		200	

Silicon NPN Power Transistors

2SD748 2SD748A

PACKAGE OUTLINE

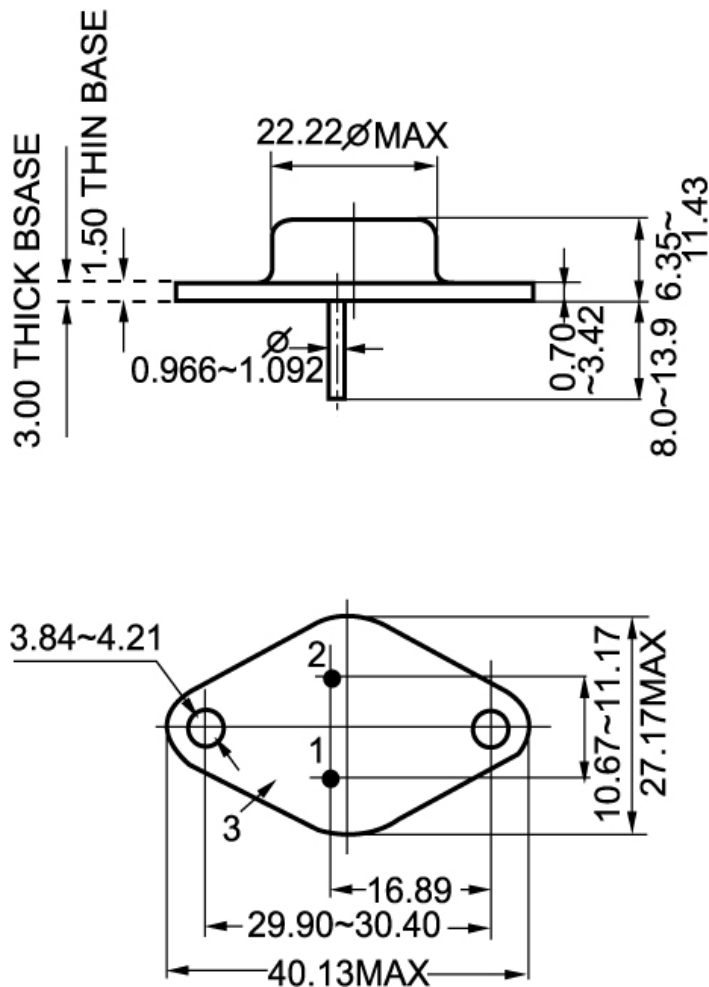


Fig.2 outline dimensions (unindicated tolerance: ± 0.1 mm)