

Silicon NPN Power Transistors

2SD1499

DESCRIPTION

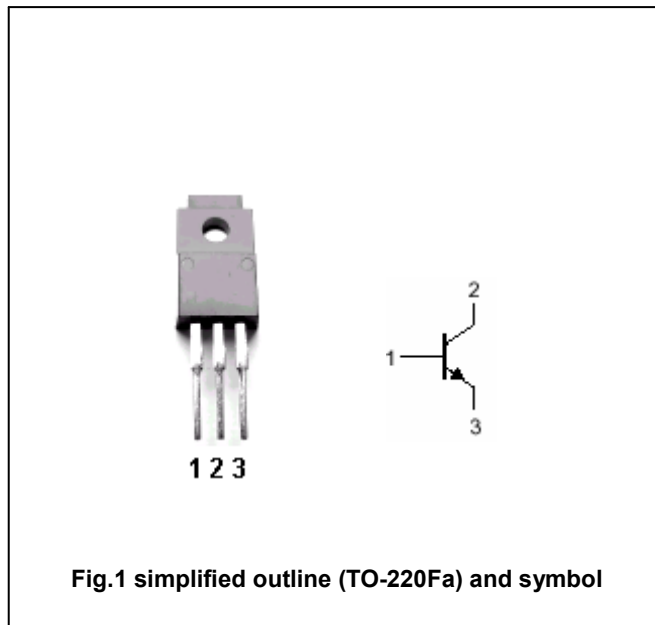
- With TO-220Fa package
- High transition frequency
- Complement to type 2SB1063
- Wide area of safe operation

APPLICATIONS

- For high power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	100	V
V _{CEO}	Collector -emitter voltage	Open base	100	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 power dissipation	T _a =25°C	2.0	W
		T _C =25°C	40	
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-55~150	°C

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CHARACTERISTICS

T_j=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	100			V
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} =100V; 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			
f _T	Transition frequency	I _C =0.5A; V _{CE} =5V		20		MHz
C _{OB}	Collector output capacitance	f=1MHz; V _{CB} =10V		170		pF

◆ h_{FE-2} Classifications

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

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PACKAGE OUTLINE

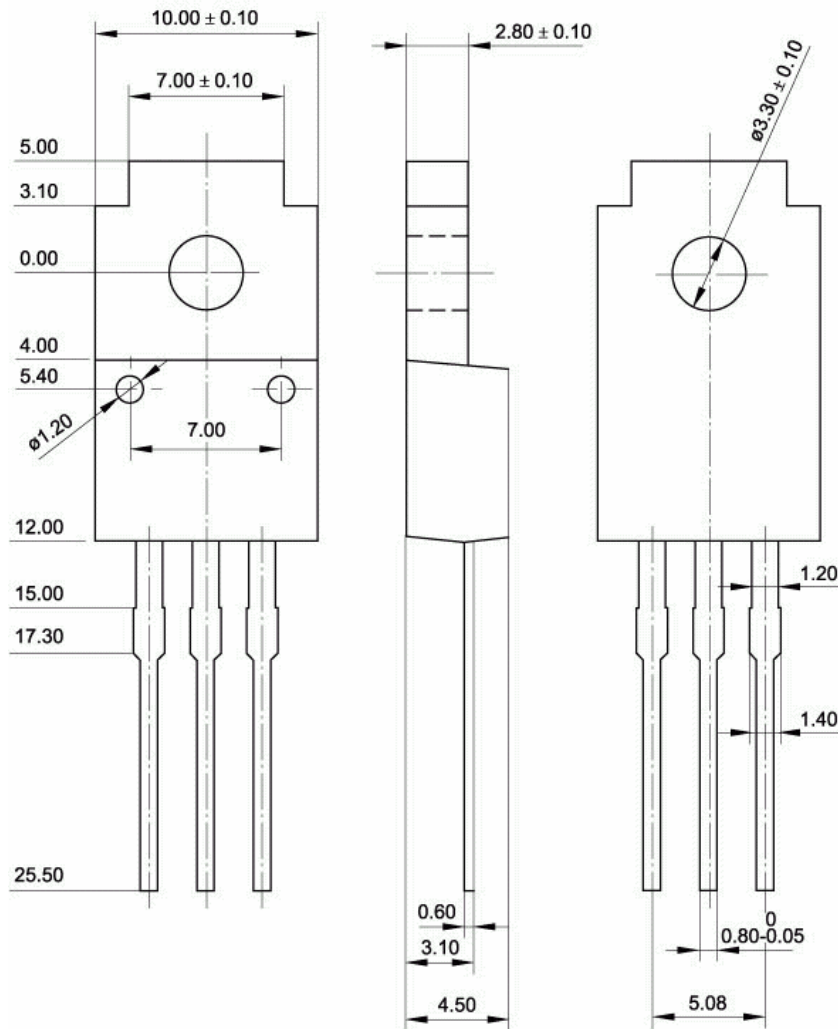


Fig.2 Outline dimensions (unindicated tolerance: ± 0.15 mm)