

Silicon NPN Power Transistors

2N6499

DESCRIPTION

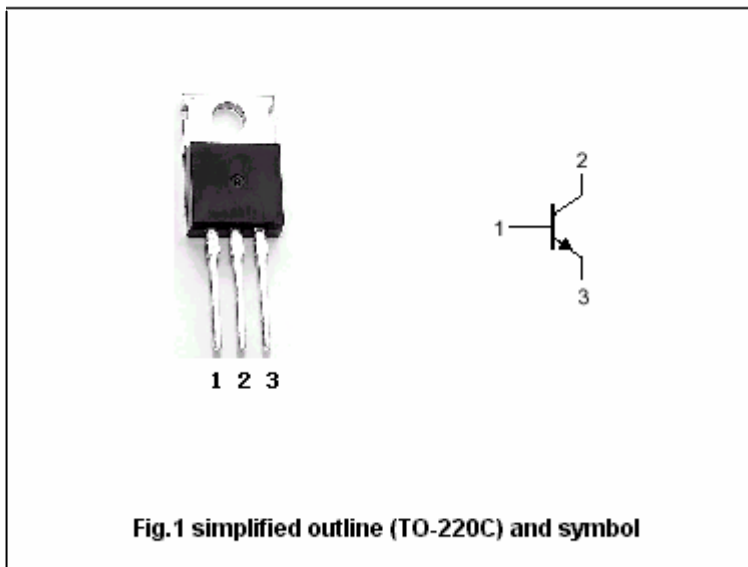
- With TO-220C package
- High breakdown voltage

APPLICATIONS

- Designed for high voltage inverters, switching regulators and line operated amplifier applications

PINNING

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



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	450	V
V _{CEO}	Collector-emitter voltage	Open base	350	V
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current (DC)		5	A
I _{CM}	Collector current-Peak		10	A
I _B	Base current		2	A
P _D	Total power dissipation	T _C =25°C	80	W
T _j	Junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
R _{th j-c}	Thermal resistance from junction to case	1.56	°C/W

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CHARACTERISTICS

T_j=25 °C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	I _C =25mA ; I _B =0	350			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =2.5A; I _B =0.5A			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =5A ; I _B =2A			5.0	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =2.5A; I _B =0.5A			1.5	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =5A ; I _B =2A			2.5	V
I _{CEX}	Collector cut-off current	V _{CE} =450V; V _{BE} =-1.5V V _{CE} =225V; V _{BE} =-1.5V; T _C =100 °C			1.0 10	mA
I _{EBO}	Emitter cut-off current	V _{EB} =6V; I _C =0			1.0	mA
h _{FE-1}	DC current gain	I _C =2.5A ; V _{CE} =10V	10		75	
h _{FE-2}	DC current gain	I _C =5A ; V _{CE} =10V	3			
f _T	Transition frequency	I _C =250mA ; V _{CE} =10V; f=1MHz	5.0			

Switching times

t _r	Rise time	I _C =2.5A, I _{B1} =-I _{B2} =0.5A V _{CC} =125V			1.0	μs
t _{stg}	Storage time				2.5	μs
t _f	Fall time				1.0	μs

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PACKAGE OUTLINE



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