

Silicon PNP Power Transistors

2SA1129

DESCRIPTION

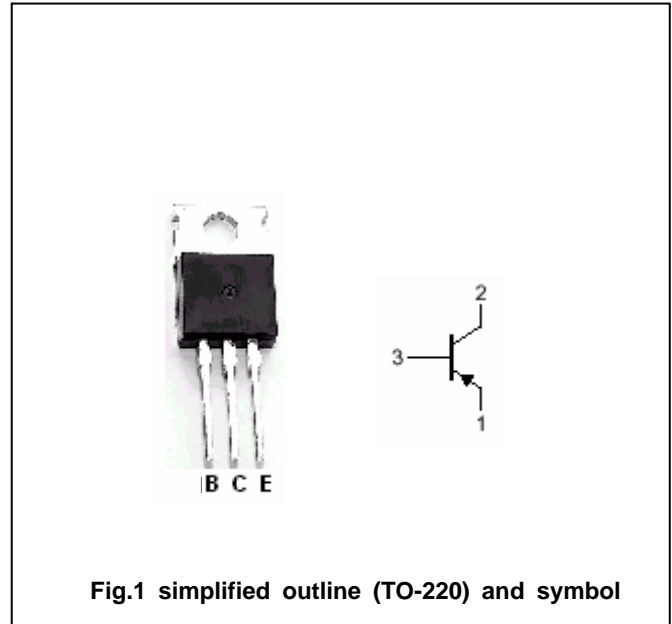
- With TO-220 package
- Low collector saturation voltage
- Large current capacity
- Complement to type 2SC2654

APPLICATIONS

- For low-frequency power amplifiers and mid-speed switching 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	-30	V
V_{CEO}	Collector-emitter voltage	Open base	-30	V
V_{EBO}	Emitter-base voltage	Open collector	-7	V
I_C	Collector current		-7	A
I_{CM}	Collector current-peak		-15	A
I_B	Base current		-3.5	A
P_T	Collector power dissipation	$T_C=25$	40	W
		$T_a=25$	1.5	
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

Silicon PNP Power Transistors

2SA1129

CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA, I _B =0	-30			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =-3A; I _B =-0.1A			-0.3	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =-5A; I _B =-0.5A			-0.6	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =-3A; I _B =-0.1A			-1.5	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =-5A; I _B =-0.5A			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-30V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-10	μA
h _{FE-1}	DC current gain	I _C =-3A; V _{CE} =-1V	40		200	
h _{FE-2}	DC current gain	I _C =-5A; V _{CE} =-1V	20			

Switching times resistive load

t _{on}	Turn-on time	I _C =-5.0A I _{B1} =- I _{B2} =-0.5A R _L =4 Ω; V _{CC} =-20V			1.0	μs
t _{stg}	Storage time				2.5	μs
t _f	Fall time				1.0	μs

◆ h_{FE-1} Classifications

M	L	K
40-80	60-120	100-200

Silicon PNP Power Transistors

2SA1129

PACKAGE OUTLINE



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