

Silicon PNP Power Transistors

2SA1129

DESCRIPTION

- With TO-220 package
- Complement to type 2SC2654
- Low collector saturation vottage

APPLICATIONS

- For low-frequency power amplifiers and mid-speed switching applications

PINNING

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

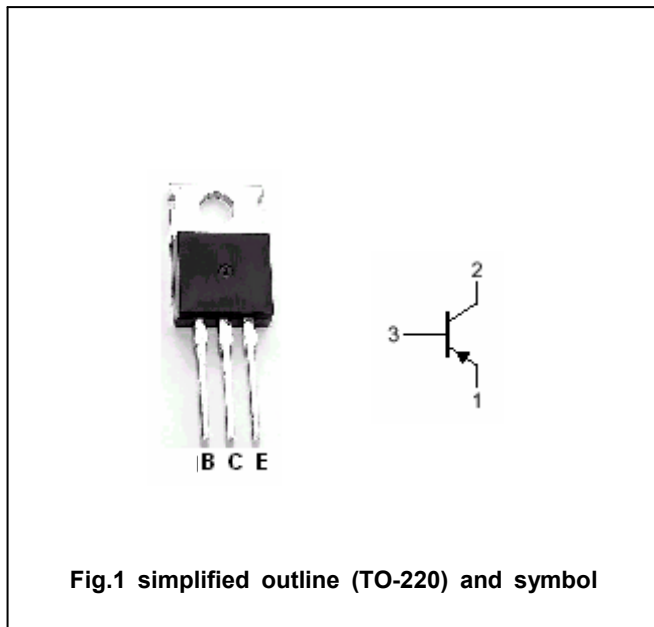


Fig.1 simplified outline (TO-220) and symbol

Absolute maximum ratings (Ta=25°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 (DC)		-7	A
I _{CM}	Collector current-peak		-15	A
I _B	Base current (DC)		-3.5	A
P _T	Total power dissipation	T _C =25°C	40	W
		T _a =25°C	1.5	
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 _{CE(sat)-1}	Collector-emitter saturation voltage	I _C =-3A ; I _B =-0.1A			-0.3	V
V _{CE(sat)-2}	Collector-emitter saturation voltage	I _C =-5A ; I _B =-0.5A			-0.6	V
V _{BE(sat)-1}	Base-emitter saturation voltage	I _C =-3A ; I _B =-0.1A			-1.5	V
V _{BE(sat)-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

t _{on}	Turn-on time	I _C =-5.0A I _{B1} =-0.5 A , I _{B2} =0.5A V _{CC} ≈20V, R _L =4.0Ω			1.0	μs
t _s	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

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PACKAGE OUTLINE

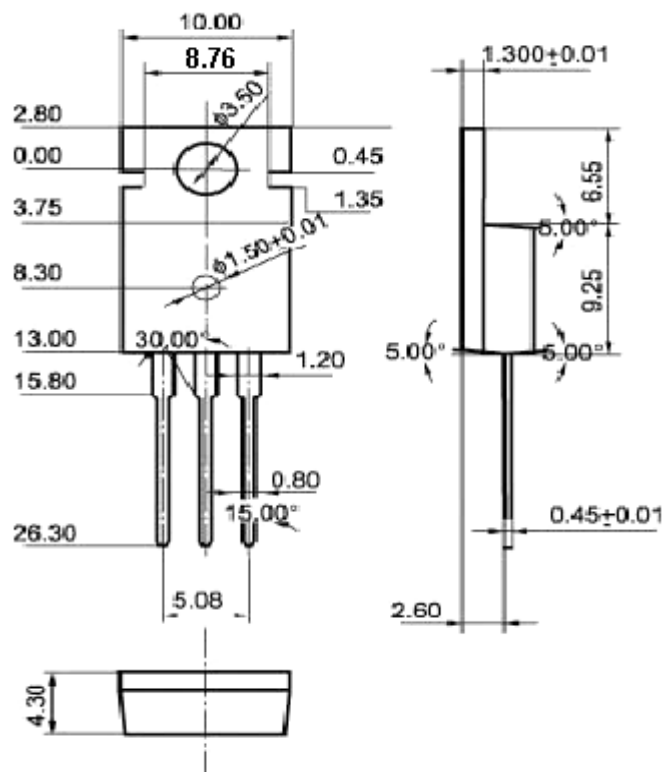


Fig.2 outline dimensions (unindicated tolerance: ±0.10 mm)