

Silicon PNP Power Transistors

2SA1129

DESCRIPTION

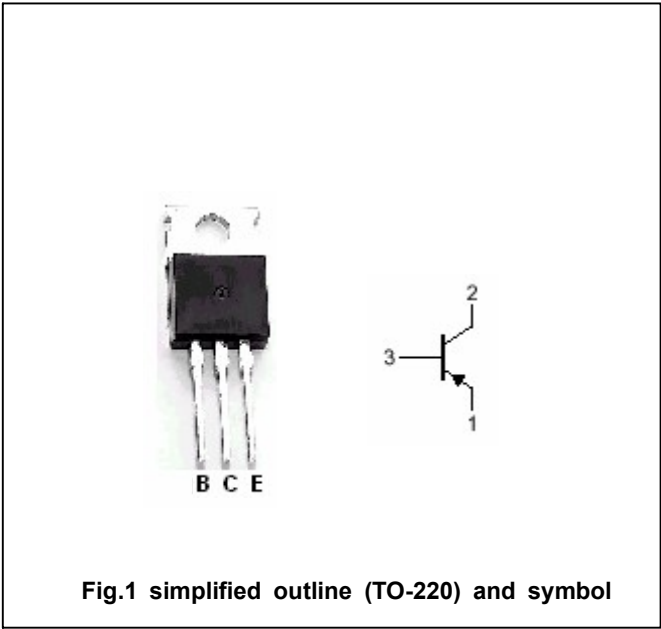
- With TO-220 package
- Low collector saturation voltage
- Large current capacity
- Complement to type 2SC2654

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(Ta=25℃)

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	$T_C=25^{\circ}C$	40	W
		$T_a=25^{\circ}C$	1.5	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25°C 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	$I_C=-5.0A, I_{B1}=-I_{B2}=-0.5A$ $R_L=4\Omega; V_{CC}=-20V$			1.0	μs
t_{stg}	Storage time				2.5	μs
t_f	Fall time				1.0	μs

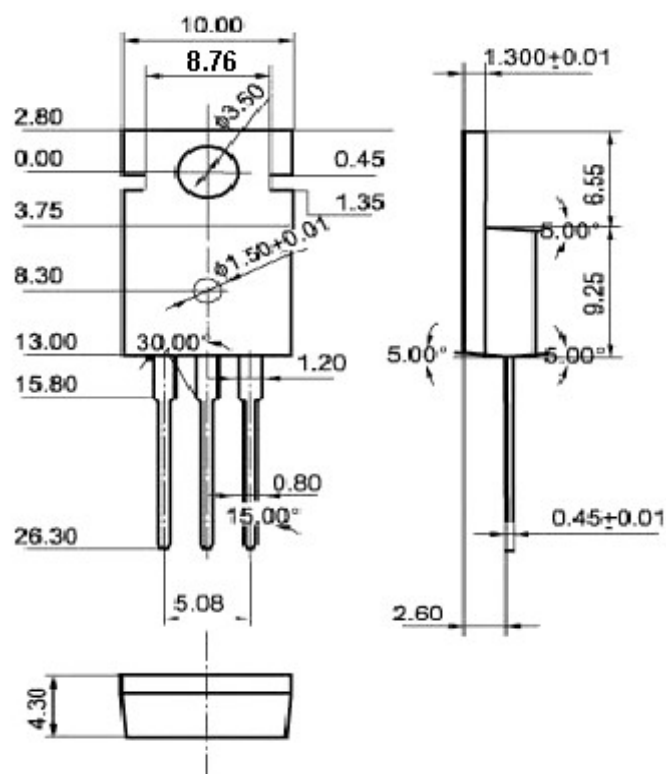
□ h_{FE-1} Classifications

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

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PACKAGE OUTLINE

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

