

Silicon PNP Power Transistors

2SA839

DESCRIPTION

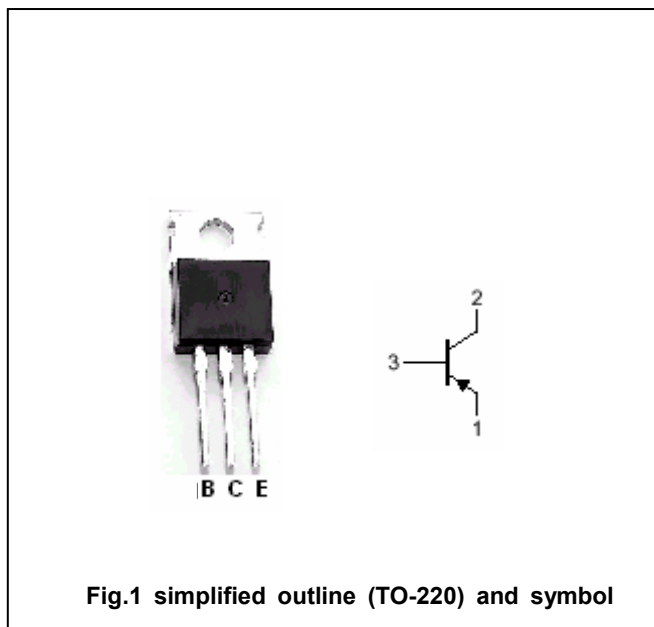
- With TO-220 package
- Complement to type 2SC1669
- High breakdown voltage

APPLICATIONS

- Audio power amplifier applications
- Driver stage amplifier 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	-150	V
V_{CEO}	Collector-emitter voltage	Open base	-150	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-1.5	A
I_E	Emitter current		1.5	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	25	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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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	$I_C=-10mA, I_B=0$	-150			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-1mA, I_C=0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-0.5A; I_B=-50mA$			-1.5	V
V_{BE}	Base-emitter on voltage	$I_C=-0.5A; V_{CE}=-10V$			-1.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=-100V; I_E=0$			-20	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-5V; I_C=0$			-10	μA
h_{FE-1}	DC current gain	$I_C=-0.5A; V_{CE}=-10V$	40		240	
h_{FE-2}	DC current gain	$I_C=-1A; V_{CE}=-10V$	20			
C_{OB}	Output capacitance	$I_E=0; V_{CB}=-10V; f=1MHz$		100		pF
f_T	Transition frequency	$I_C=-0.5A; V_{CE}=-10V$		6		MHz

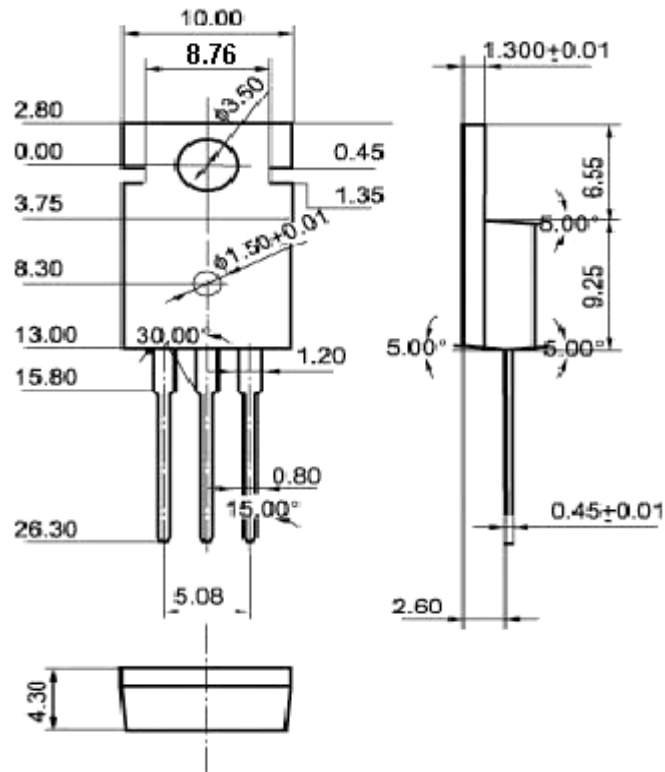
◆ h_{FE-1} Classifications

R	O	Y
40-80	70-140	120-240

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PACKAGE OUTLINE

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