

Silicon NPN Power Transistors

2SC2239

DESCRIPTION

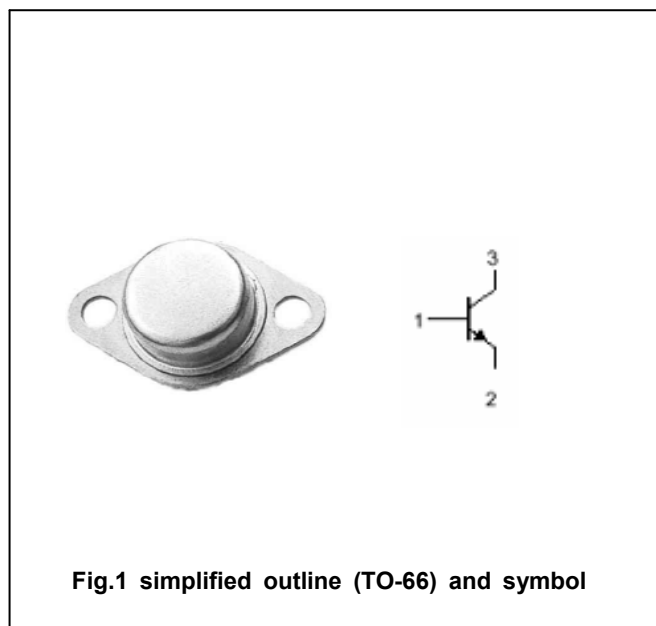
- With TO-66 package
- Complement to type 2SA969
- High breakdown votage

APPLICATIONS

- Power amplifier applications
- Driver stage amplifier applications

PINNING (See Fig.2)

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

Absolute maximum ratings($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	160	V
V_{CEO}	Collector-emitter voltage	Open base	160	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_T	Total 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	$I_C=10mA; I_B=0$	160			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=1mA; I_C=0$	5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C=500mA; I_B=50mA$			1.5	V
V_{BE}	Base-emitter on voltage	$I_C=500mA; V_{CE}=5V$			1.0	V
I_{CBO}	Collector cut-off current	$V_{CB}=160V; I_E=0$			1.0	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=5V; I_C=0$			1.0	μA
h_{FE}	DC current gain	$I_C=100mA; V_{CE}=5V$	70		240	
C_{ob}	Output capacitance	$I_E=0; V_{CB}=10V, f=1MHz$		25		pF
f_T	Transition frequency	$I_C=100mA; V_{CE}=10V$		100		MHz

◆ h_{FE} Classifications

O	Y
70-140	120-240

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PACKAGE OUTLINE

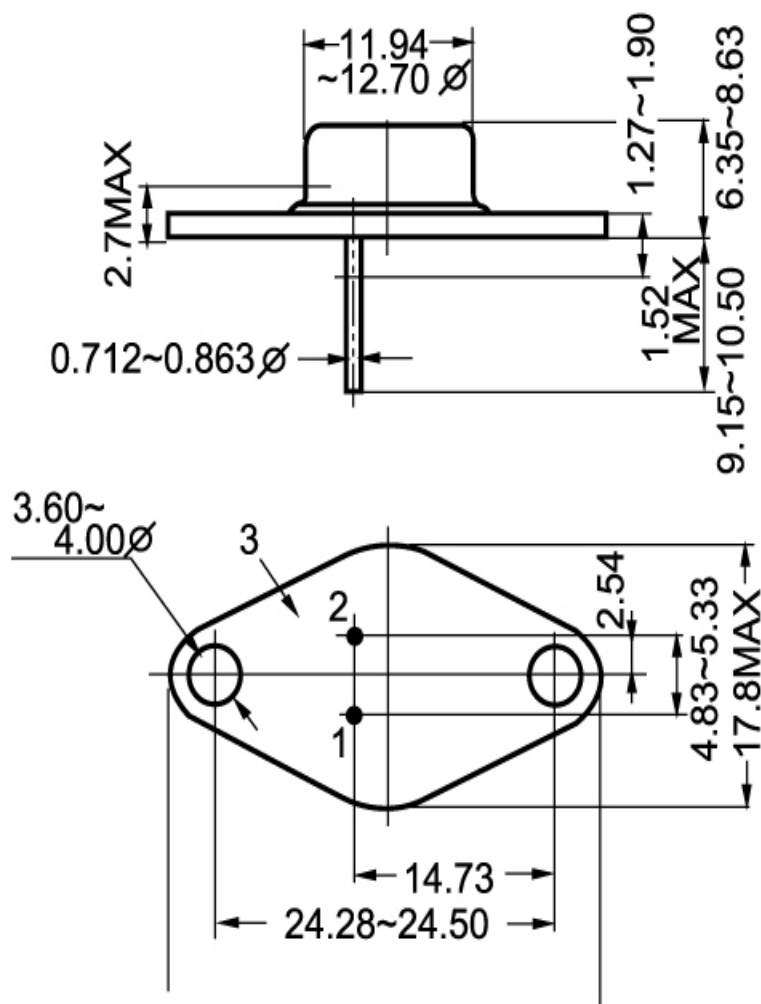


Fig.2 Outline dimensions