

Silicon NPN Power Transistors

2SC3229

DESCRIPTION

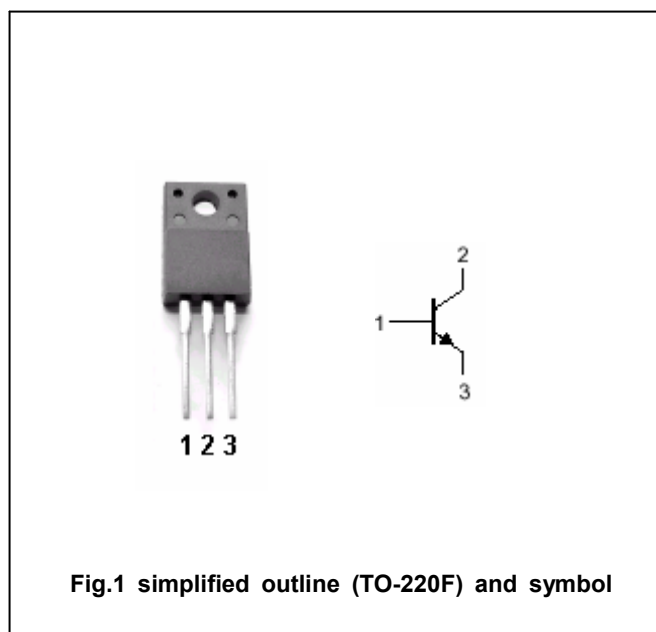
- With TO-220F package
- High voltage: $V_{CEO}=300V(\text{min})$

APPLICATIONS

- For color TV chroma output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	300	V
V_{CEO}	Collector-emitter voltage	Open base	300	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		100	mA
I_B	Base current		20	mA
P_C	Collector power dissipation		2	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEsat}	Collector-emitter saturation voltage	I _C =10mA; I _B =1mA			1.0	V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =100μA; I _B =0	300			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10μA; I _C =0	7			V
h _{FE-1}	DC current gain	I _C =0.5mA; V _{CE} =10V	20			
h _{FE-2}	DC current gain	I _C =20mA; V _{CE} =10V	30		200	
I _{CBO}	Collector cut-off current	V _{CB} =240V; I _E =0			1.0	μA
I _{EBO}	Emitter cut-off current	V _{EB} =5V; I _C =0			1.0	μA
C _{OB}	Output capacitance	I _E =0; V _{CB} =20V; f=1MHz			4.0	pF
f _T	Transition frequency	I _E =20mA; V _{CB} =20V	75			MHz

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Technical drawing showing three views of a vertical structure with dimensions in millimeters.

Front View (Left):

- Overall width: $10.00^{+0.10}_0$
- Overall height: 15.00
- Top section width: 6.50
- Top section height: 15.00
- Central circular opening diameter: $\varnothing 3.20$
- Four smaller circular openings (two on each side): $2-\varnothing 1.20$ and $2-\varnothing 1.50$
- Vertical slots at the base: width 1.20 , spacing 5.10 , and base width $0.80^{0}_{-0.05}$

Side View (Middle):

- Overall height: 15.00
- Base width: 0.60
- Top section width: 4.50
- Top section height: 6.50
- Vertical slots at the base: width 2.30

Top View (Right):

- Overall width: 6.50
- Overall height: 15.00 ± 0.05
- Top section width: 6.50
- Top section height: 1.60
- Four vertical slots at the base: width 1.20