

**Inchange Semiconductor**

**Product Specification**

**Silicon NPN Power Transistors**

**2SC3229**

**DESCRIPTION**

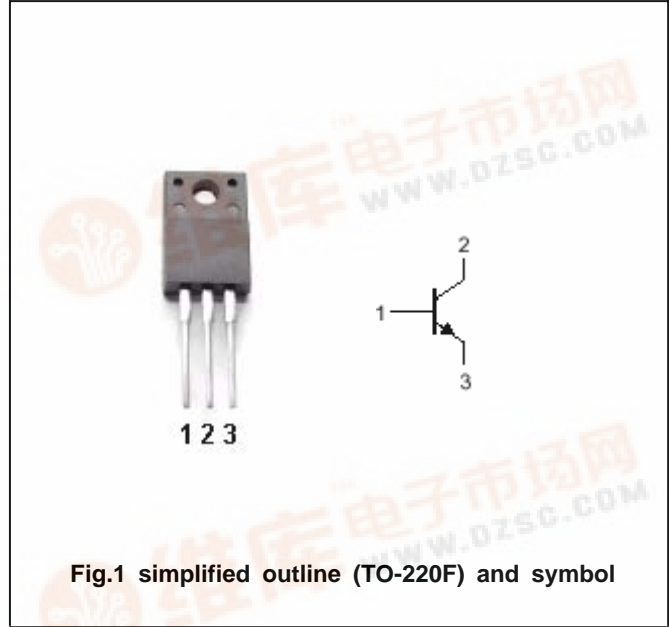
- With TO-220F package
- High voltage:  $V_{CEO}=300V(\text{min})$

**APPLICATIONS**

- For color TV chroma output applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



**Absolute maximum ratings (Ta=25°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	°C
$T_{stg}$	Storage temperature		-55~150	°C

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## CHARACTERISTICS

T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =10mA; I <sub>B</sub> =1mA			1.0	V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =100 μ A; I <sub>B</sub> =0	300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10 μ A; I <sub>C</sub> =0	7			V
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =0.5mA; V <sub>CE</sub> =10V	20			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =20mA; V <sub>CE</sub> =10V	30		200	
I <sub>CBO</sub>	Collector cut-off current	V <sub>CB</sub> =240V; I <sub>E</sub> =0			1.0	μ A
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =5V; I <sub>C</sub> =0			1.0	μ A
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =20V; f=1MHz			4.0	pF
f <sub>T</sub>	Transition frequency	I <sub>E</sub> =20mA; V <sub>CB</sub> =20V	75			MHz

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PACKAGE OUTLINE

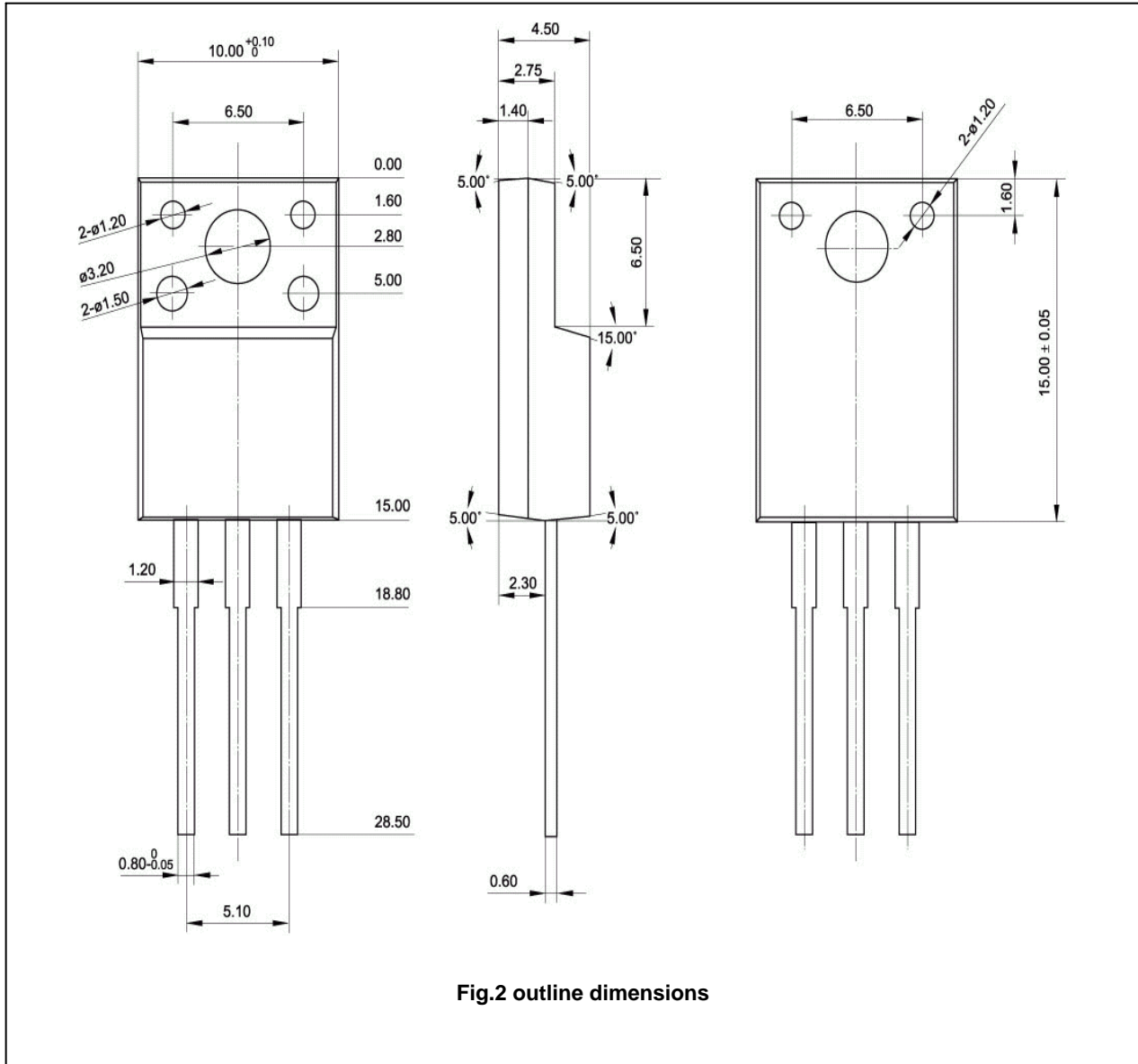


Fig.2 outline dimensions