

Silicon NPN Power Transistors

2SC1514

DESCRIPTION

- With TO-220F package
- High Voltage
- High frequency

APPLICATIONS

- TV chroma, video, audio output applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

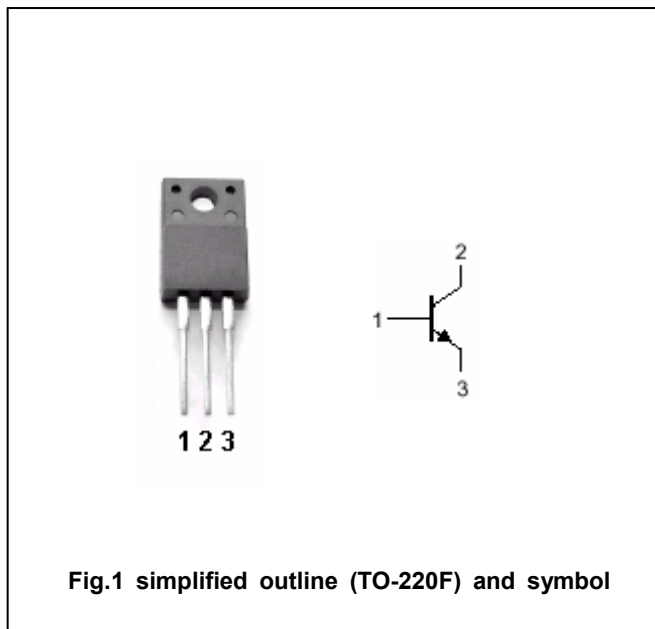


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	300	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	300	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	7	V
I <sub>C</sub>	Collector current		0.1	A
I <sub>CM</sub>	Collector current-peak		0.2	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25°C	1.25	W
		T <sub>C</sub> =25°C	15	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-40~150	°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> =20mA I <sub>B</sub> =2mA			1.5	V
V <sub>BE</sub>	Base-emitter on voltage	I <sub>C</sub> =20mA ; V <sub>CE</sub> =20V			1.2	V
V <sub>(BR)CBO</sub>	Collector-base breakdown voltage	I <sub>C</sub> =10μA; I <sub>E</sub> =0	300			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage	I <sub>C</sub> =100μA; I <sub>B</sub> =0	300			V
V <sub>(BR)EBO</sub>	Emitter-base breakdown voltage	I <sub>E</sub> =10μA; I <sub>C</sub> =0	7			V
h <sub>FE</sub>	DC current gain	I <sub>C</sub> =20mA ; V <sub>CE</sub> =20V	30		200	
C <sub>OB</sub>	Output capacitance	I <sub>E</sub> =0; V <sub>CB</sub> =30V; f=1MHz			4	pF
f <sub>T</sub>	Transition frequency	I <sub>E</sub> =20mA ; V <sub>CB</sub> =20V	50			MHz

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PACKAGE OUTLINE

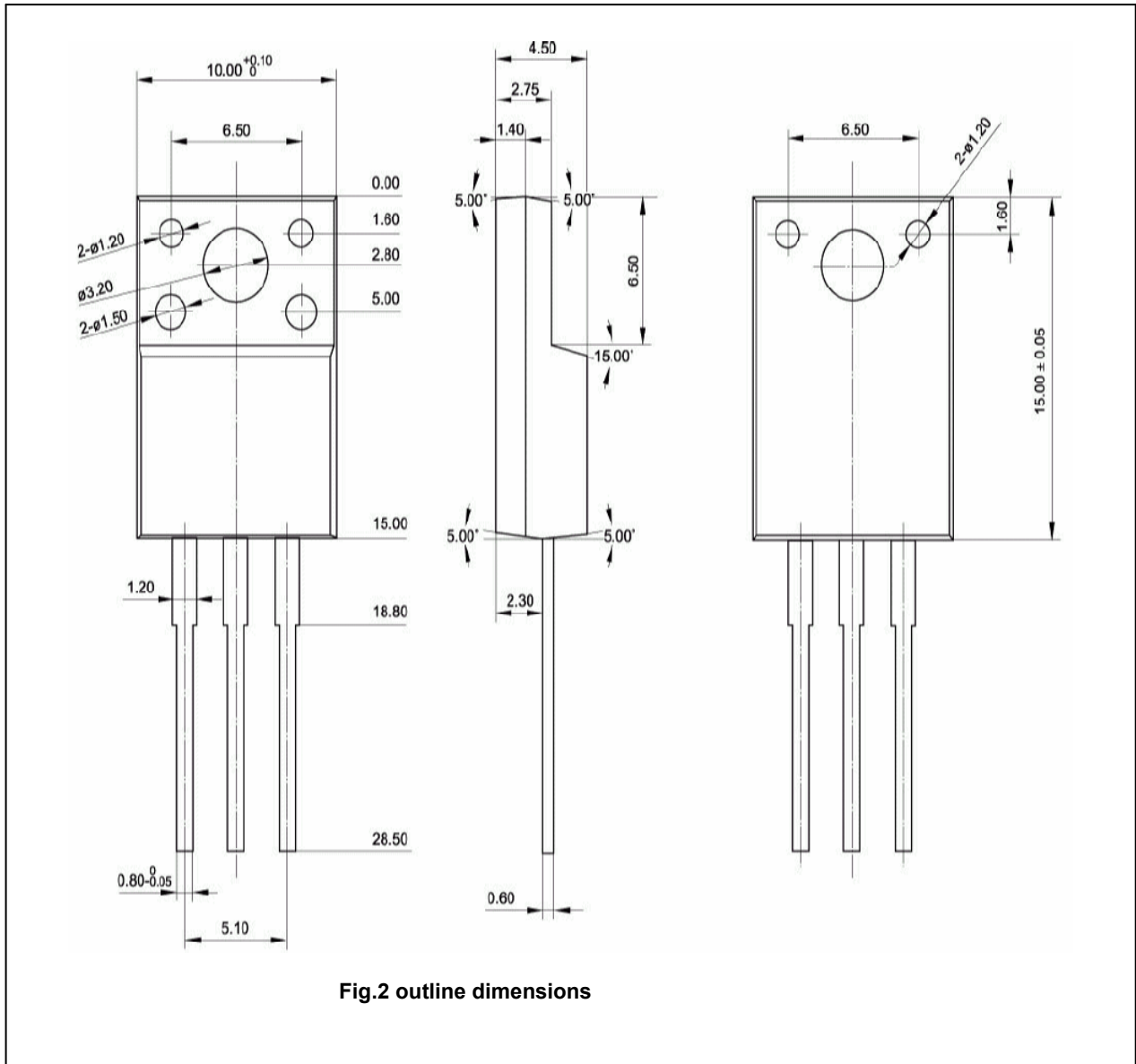


Fig.2 outline dimensions