

**Silicon NPN Power Transistors**

**2SC4075**

**DESCRIPTION**

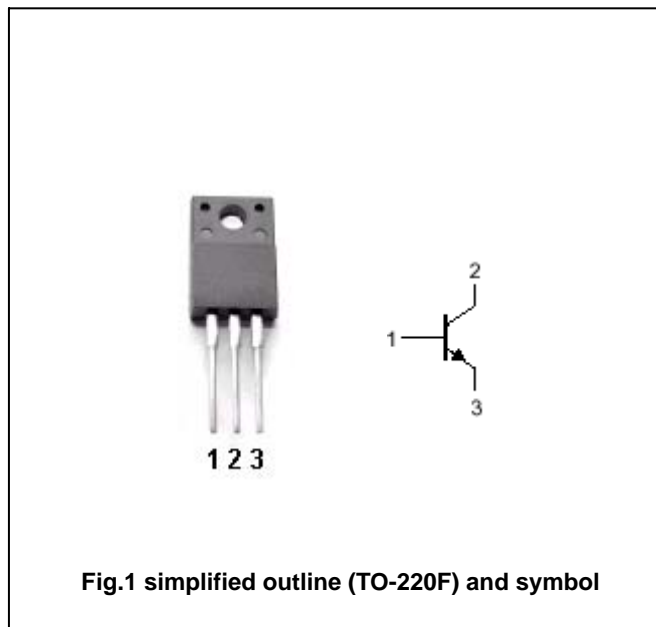
- With TO-220F package
- High voltage
- Wide area of safe operation

**APPLICATIONS**

- Color TV chroma output ,sound output and B/W TV video output ,audio output applications

**PINNING**

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



**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		0.2	A
I <sub>CM</sub>	Collector current-peak		0.7	A
P <sub>C</sub>	Collector power dissipation	T <sub>a</sub> =25°C	2	W
		T <sub>C</sub> =25°C	10	
T <sub>j</sub>	Junction temperature		150	°C
T <sub>stg</sub>	Storage temperature		-55~150	°C

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## CHARACTERISTICS

 $T_j=25^\circ\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1\text{mA}; I_B=0$	300			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=10\ \mu\text{A}; I_E=0$	300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\ \mu\text{A}; I_C=0$	7			V
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=50\text{mA}; I_B=5\text{mA}$			2.0	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=200\text{V}; I_E=0$			0.1	$\mu\text{A}$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=5\text{V}; I_C=0$			0.1	$\mu\text{A}$
$h_{FE}$	DC current gain	$I_C=10\text{mA}; V_{CE}=10\text{V}$	40		200	
$f_T$	Transition frequency	$I_C=10\text{mA}; V_{CE}=30\text{V}$	50			MHz
$C_{OB}$	Output capacitance	$I_E=0; V_{CB}=50\text{V}; f=1\text{MHz}$			5.3	pF

◆  $h_{FE}$  Classifications

C	D	E
40-80	60-120	100-200

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PACKAGE OUTLINE

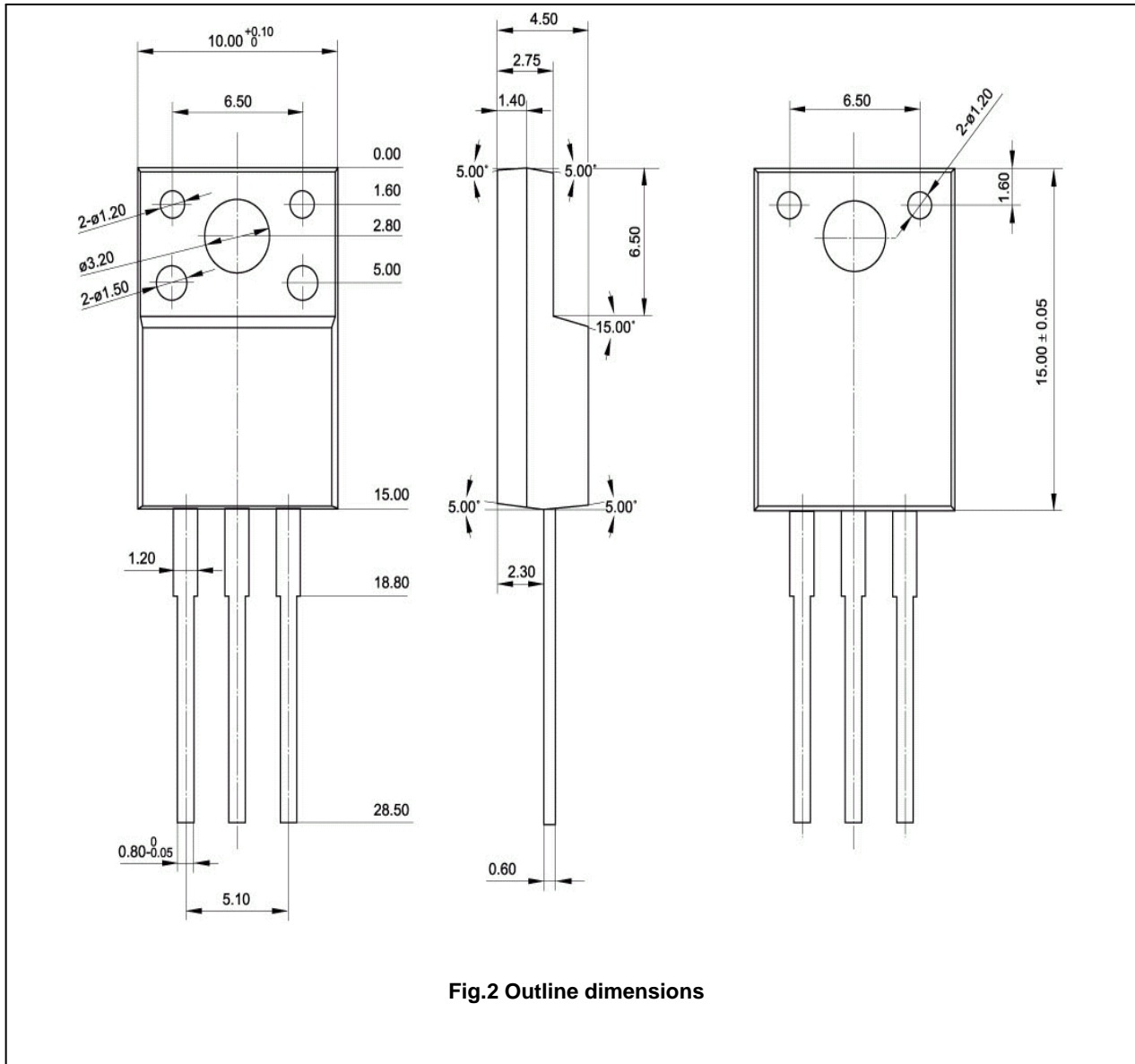


Fig.2 Outline dimensions