

**Inchange Semiconductor**

**Product Specification**

**Silicon PNP Power Transistors**

**2SB1098**

**DESCRIPTION**

- With TO-220F package
- Complement to type 2SD1589
- DARLINGTON
- High DC current gain

**APPLICATIONS**

- Low speed switching industrial use
- Low frequency power amplifier

**PINNING**

PIN	DESCRIPTION
1	Emitter
2	Collector
3	Base

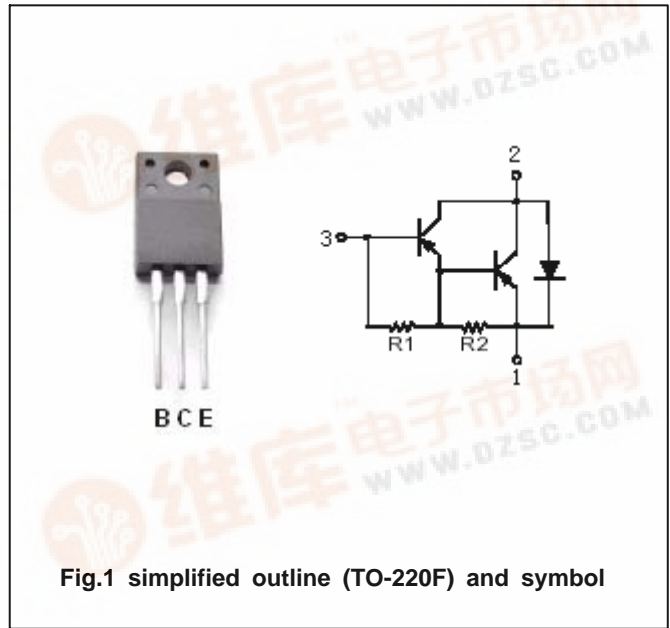


Fig.1 simplified outline (TO-220F) and symbol

**Absolute maximum ratings (Ta=25 )**

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>CBO</sub>	Collector-base voltage	Open emitter	-100	V
V <sub>CEO</sub>	Collector-emitter voltage	Open base	-100	V
V <sub>EBO</sub>	Emitter-base voltage	Open collector	-7	V
I <sub>C</sub>	Collector current		-5	A
I <sub>CM</sub>	Collector current-peak		-8	A
I <sub>B</sub>	Base current		-0.5	A
P <sub>C</sub>	Collector dissipation	T <sub>a</sub> =25	2	W
		T <sub>C</sub> =25	20	
T <sub>j</sub>	Junction temperature		150	
T <sub>stg</sub>	Storage temperature		-55~150	

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## CHARACTERISTICS

 $T_j=25$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEsat}$	Collector-emitter saturation voltage	$I_C=-3A; I_B=-3mA$			-1.5	V
$V_{BEsat}$	Base-emitter saturation voltage	$I_C=-3A; I_B=-3mA$			-2.0	V
$I_{CBO}$	Collector cut-off current	$V_{CB}=-100V; I_E=0$			-1	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=-5V; I_C=0$			-3	mA
$h_{FE-1}$	DC current gain	$I_C=-3A; V_{CE}=-2V$	2000		15000	
$h_{FE-2}$	DC current gain	$I_C=-5A; V_{CE}=-2V$	500			

## Switching times

$t_{on}$	Turn-on time	$I_C=-3A; I_{B1}=-I_{B2}=-3mA$ $R_L=17; V_{CC}=-50V;$		0.5		$\mu s$
$t_s$	Storage time			1		$\mu s$
$t_f$	Fall time			1		$\mu s$

◆  $h_{FE-1}$  Classifications

R	O	Y
2000-5000	3000-7000	5000-15000

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PACKAGE OUTLINE

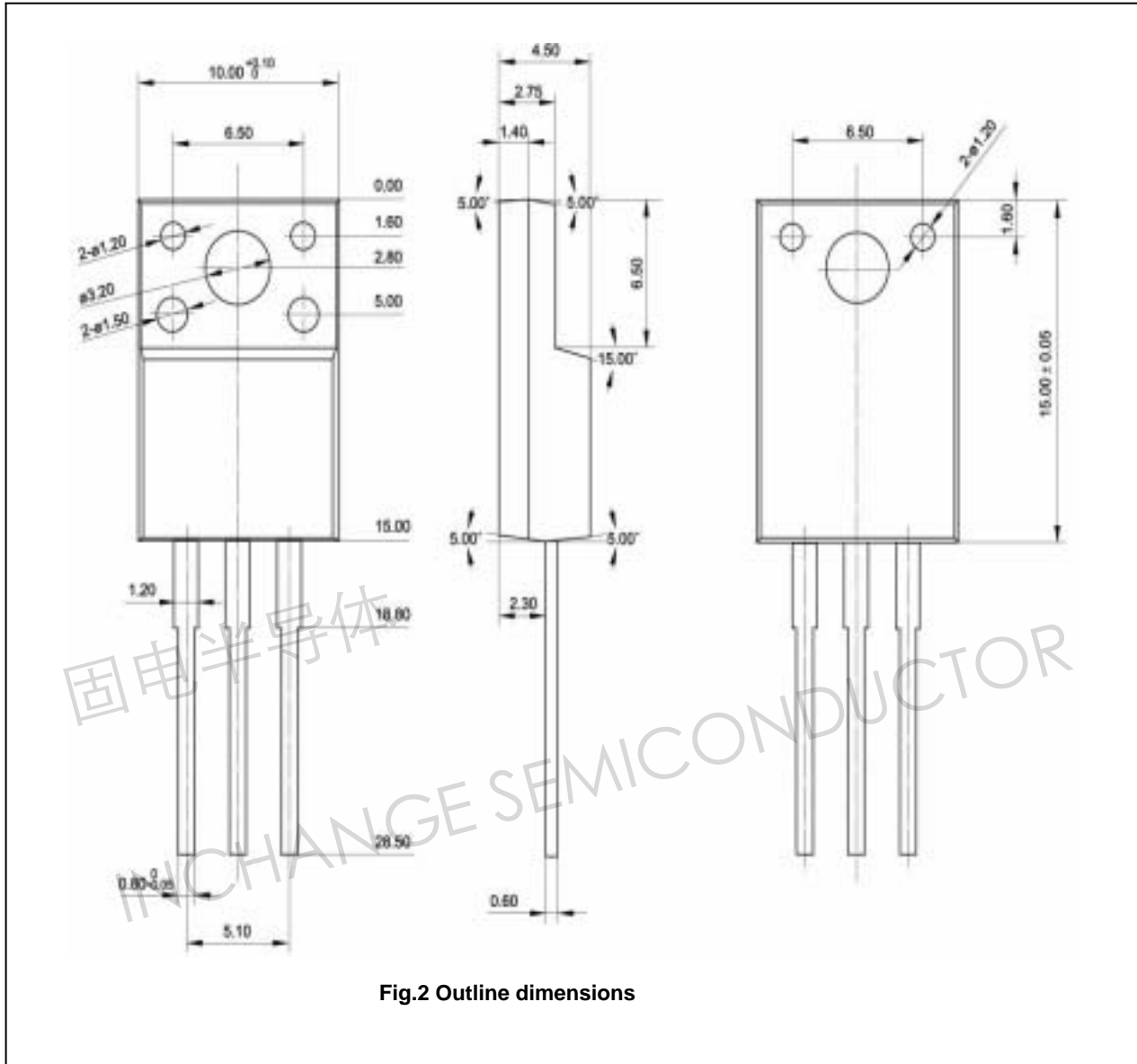


Fig.2 Outline dimensions