

Silicon PNP Power Transistors

2SB1223

DESCRIPTION

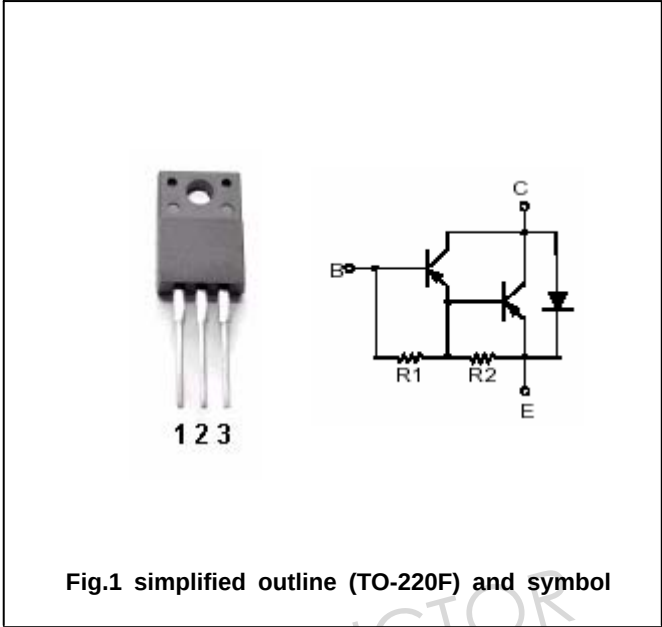
- With TO-220F package
- Complement to type 2SD1825
- High DC current gain.
- Large current capacity and wide ASO.
- DARLINGTON

APPLICATIONS

- Suitable for use in control of motor drivers, printer hammer drivers, and constant-voltage regulators.

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	Open emitter	-70	V
V _{CEO}	Collector-emitter voltage	Open base	-60	V
V _{EBO}	Emitter-base voltage	Open collector	-6	V
I _C	Collector current		-4	A
I _{CM}	Collector current-peak		-6	A
P _C	Collector dissipation	T _C =25	20	W
		T _a =25	2	
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

Tj=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -5mA; I_E = 0$	-70			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -50mA; R_{BE} = \infty$	-60			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -2A; I_B = -4mA$		-1.0	-1.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C = -2A; I_B = -4mA$			-2.0	V
I_{CBO}	Collector cut-off current	$V_{CB} = -40V; I_E = 0$			-0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V; I_C = 0$			-3.0	mA
h_{FE}	DC current gain	$I_C = -2A; V_{CE} = -2V$	2000	5000		
f_T	Transition frequency	$I_C = -2A; V_{CE} = -5V$		20		MHz

Switching times

t_{on}	Turn-on time	$I_C = 500I_{B1} = -500I_{B2} = -2A$ $V_{CC} = -20V, R_L = 10\Omega$		0.5		μs
t_{stg}	Storage time			1.4		μs
t_f	Fall time			1.2		μs

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PACKAGE OUTLINE

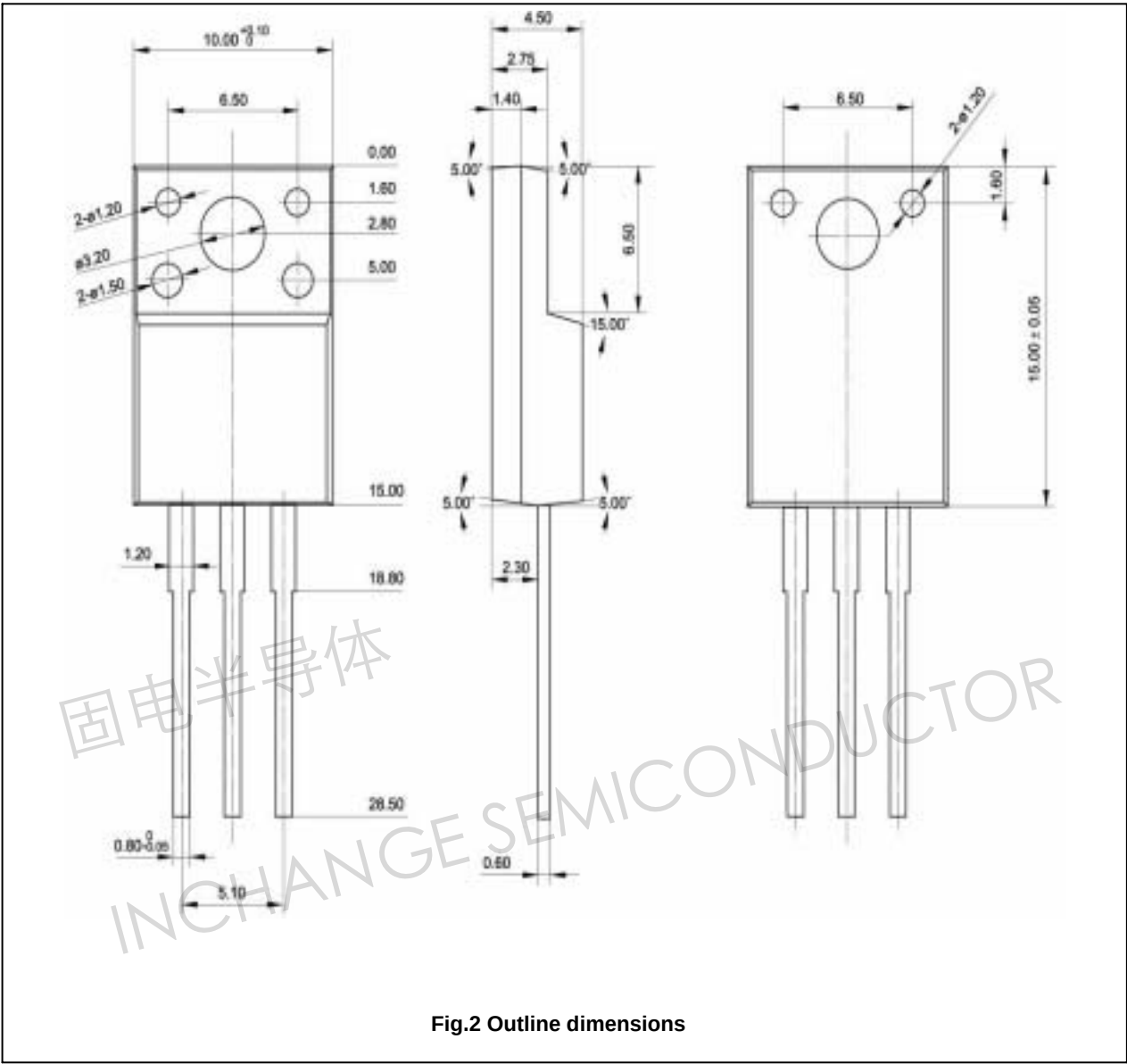


Fig.2 Outline dimensions