

Silicon PNP Power Transistors

2SB1257

DESCRIPTION

- With TO-220F package
- Complement to type 2SD2014
- High DC current gain
- DARLINGTON

APPLICATIONS

- Driver for solenoid ,relay and motor and general purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

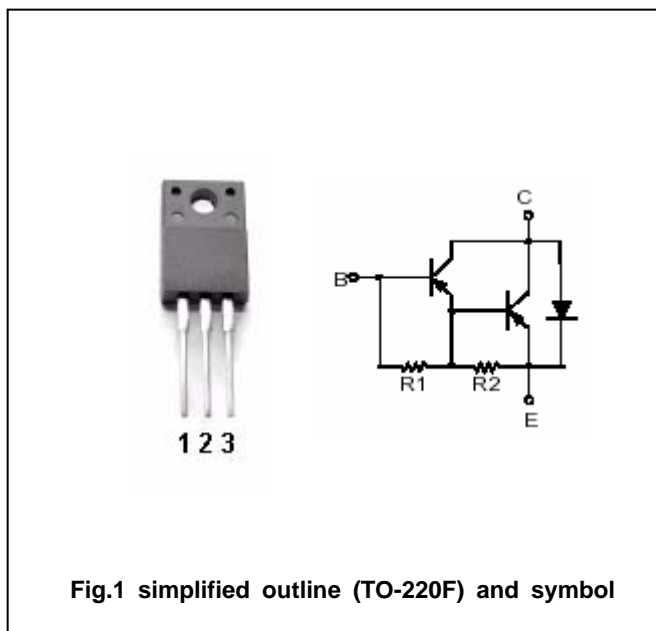


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	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
I_B	Base current		-1	A
P_C	Collector dissipation	$T_C=25$	25	W
T_j	Junction temperature		150	
T_{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =-10mA ; I _B =0	-60			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-3A; I _B =-6mA			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-3A; I _B =-6mA			-2.0	V
I _{CBO}	Collector cut-off current	V _{CB} =-60V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-6V; I _C =0			-10	μA
h _{FE}	DC current gain	I _C =-3A ; V _{CE} =-4V	2000			
f _T	Transition frequency	I _E =0.2A ; V _{CE} =-12V		150		MHz
C _{OB}	Collector output capacitance	I _E =0; f=1MHz; V _{CB} =-10V		75		pF

Switching times

t _{on}	Turn-on time	I _C =-3A; I _{B1} =-I _{B2} =-10mA V _{CC} =-30V , R _L =10		0.4		μs
t _s	Storage time			0.8		μs
t _f	Fall time			0.6		μs

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PACKAGE OUTLINE

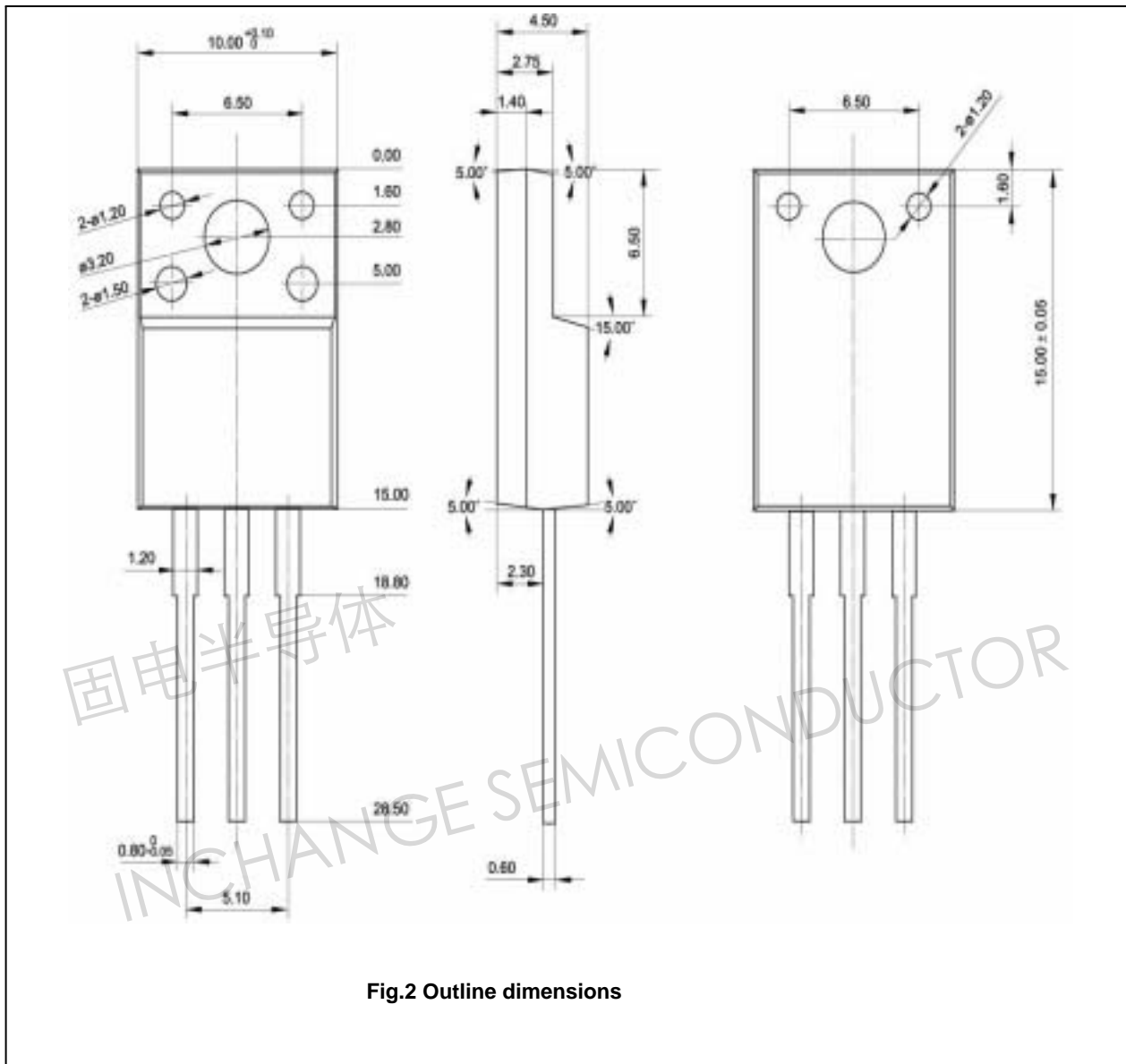


Fig.2 Outline dimensions