

Silicon PNP Power Transistors

2SB1257

DESCRIPTION

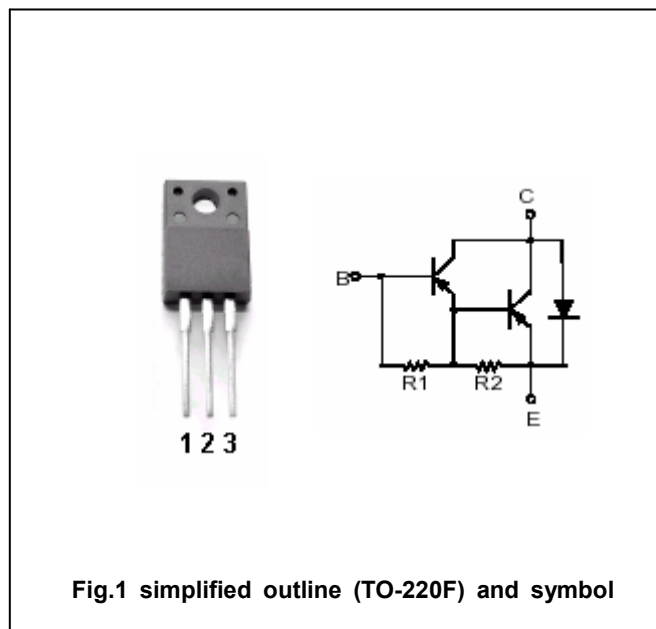
- With TO-220F package
- Complement to type 2SD2014
- High DC current gain
- DARLINGTON

APPLICATIONS

- Driver for solenoid ,relay and motor and general purpose

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

Absolute maximum ratings ($T_a=25^\circ\text{C}$)

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	$T_C=25^\circ\text{C}$	25	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon PNP Power Transistors

2SB1257

CHARACTERISTICS

Tj=25°C 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	$I_C=-3A$; $I_{B1}=-I_{B2}=-10mA$ $V_{CC}=-30V$, $R_L=10\Omega$		0.4		μs
t_s	Storage time			0.8		μs
t_f	Fall time			0.6		μs

Silicon PNP Power Transistors

2SB1257

PACKAGE OUTLINE

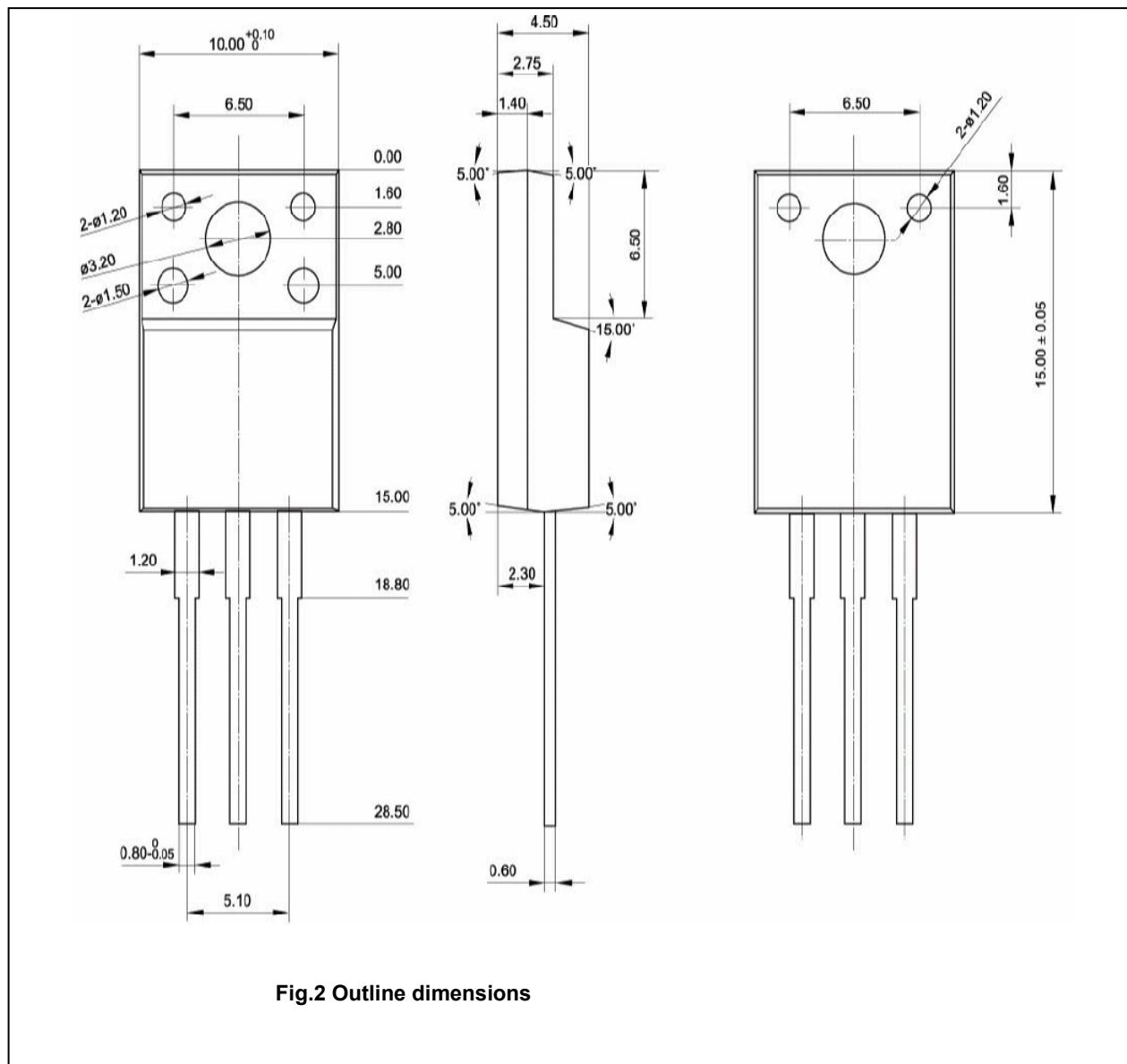


Fig.2 Outline dimensions