

Silicon PNP Power Transistors

2SB1258

DESCRIPTION

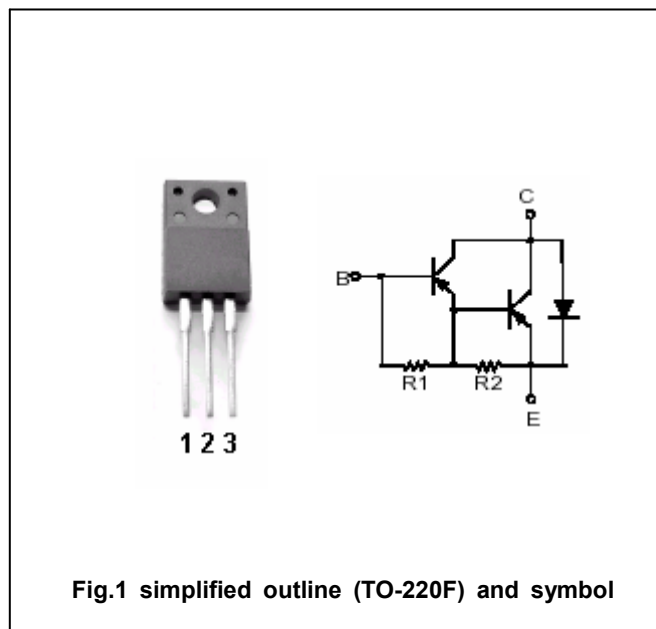
- With TO-220F package
- Complement to type 2SD1785
- High DC current gain
- DARLINGTON

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	-100	V
V_{CEO}	Collector-emitter voltage	Open base	-100	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-6	A
I_{CM}	Collector current-peak		-10	A
I_B	Base current		-1	A
P_C	Collector power dissipation	$T_C=25^\circ\text{C}$	30	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-10mA$; $I_B=0$	-100			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	$V_{CB}=-100V$; $I_E=0$			-10	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-6V$; $I_C=0$			-10	μA
h_{FE}	DC current gain	$I_C=-3A$; $V_{CE}=-2V$	1000			
f_T	Transition frequency	$I_E=0.2A$; $V_{CE}=-12V$		100		MHz
C_{OB}	Collector output capacitance	$I_E=0$; $f=1MHz$; $V_{CB}=-10V$		100		pF

Switching times

t_{on}	Turn-on time	$I_C=-3A$; $I_{B1}=-I_{B2}=-6mA$ $V_{CC}=-30V$, $R_L=10\Omega$		0.6		μs
t_s	Storage time			1.6		μs
t_f	Fall time			0.5		μs

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Technical drawing showing the outline dimensions of a vertical structure, likely a component of a machine or assembly. The drawing includes three views: a front elevation, a side elevation, and a top view.

Front Elevation Dimensions:

- Overall width: 10.00 ± 0.10
- Overall height: 15.00
- Top section width: 6.50
- Top section height: 5.00
- Central circular feature diameter: $\varnothing 3.20$
- Four smaller circular features (two on each side): 2- $\varnothing 1.20$ and 2- $\varnothing 1.50$
- Bottom section width: 5.10
- Bottom section height: 18.80
- Bottom section width (inner): 1.20
- Bottom section width (outer): 0.80 ± 0.05

Side Elevation Dimensions:

- Overall width: 4.50
- Overall height: 15.00
- Top flange width: 2.75
- Top flange height: 1.40
- Top flange thickness: 5.00
- Main body width: 5.00
- Main body height: 6.50
- Bottom section width: 2.30
- Bottom section height: 5.00
- Bottom section width (inner): 0.60

Top View Dimensions:

- Overall width: 6.50
- Overall height: 15.00 ± 0.05
- Top section width: 6.50
- Top section height: 1.60
- Central circular feature diameter: $\varnothing 3.20$
- Two smaller circular features (one on each side): 2- $\varnothing 1.20$