

Silicon PNP Darlington Power Transistors

2SB1382

DESCRIPTION

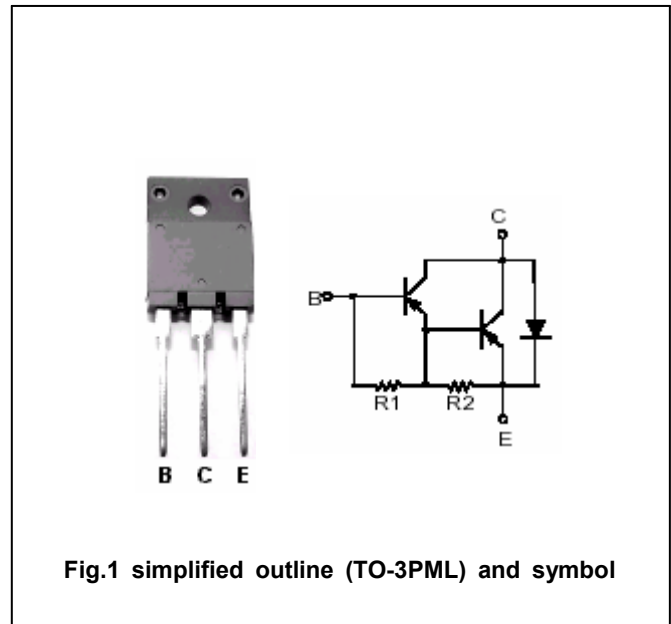
- With TO-3PML package
- Complement to type 2SD2082

APPLICATIONS

- For chopper regulator,DC motor driver and general purpose applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

**Maximum absolute ratings($T_c=25^\circ\text{C}$)**

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-120	V
V_{CEO}	Collector-emitter voltage	Open base	-120	V
V_{EBO}	Emitter-base voltage	Open collector	-6	V
I_C	Collector current		-16	A
I_{CM}	Collector current-peak		-26	A
I_B	Base current		-1	A
P_C	Collector power dissipation	$T_c=25^\circ\text{C}$	75	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

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CHARACTERISTICS

T_j=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	-120			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-8 A; I _B =-16m A			-1.5	V
V _{BEsat}	Base-emitter saturation voltage	I _C =-8 A; I _B =-16m A			-2.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-120V; I _E =0			-10	μA
I _{EBO}	Emitter cut-off current	V _{EB} =-6V; I _C =0			-10	mA
h _{FE}	DC current gain	I _C =-8A ; V _{CE} =-4V	2000			
f _T	Transition frequency	I _E =1A ; V _{CE} =-12V		50		MHz
C _{OB}	Output capacitance	I _E =0; V _{CB} =-10V; f=1MHz		350		pF

Switching times

t _{on}	Turn-on time	I _C =-8A; R _L =5Ω I _{B1} =-I _{B2} =-16mA V _{CC} =-40V		0.8		μs
t _s	Storage time			1.8		μs
t _f	Fall time			1.0		μs

