

Silicon NPN Power Transistors

2SD1180

DESCRIPTION

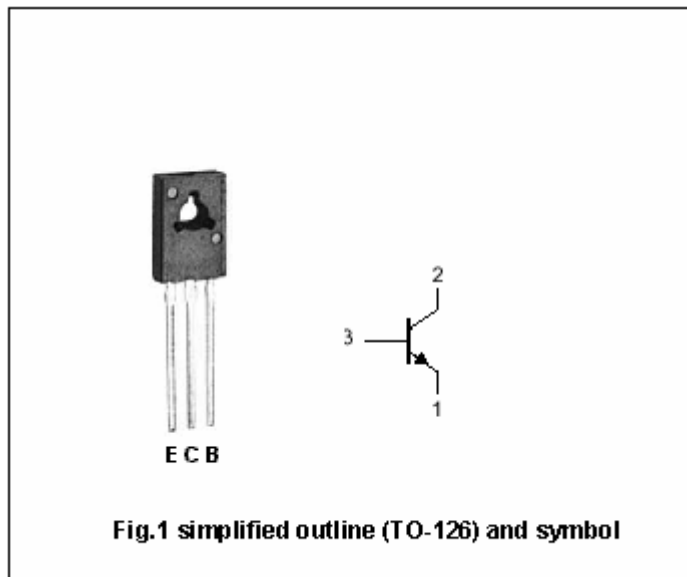
- With TO-126 package
- Low collector saturation voltage

APPLICATIONS

- Designed for use in audio and radio frequency power amplifiers

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base

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

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	120	V
V_{CEO}	Collector-emitter voltage	Open base	110	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current		1.5	A
I_{CM}	Collector current-peak		2.5	A
P_C	Collector power dissipation	$T_a=25^\circ\text{C}$	1.2	W
		$T_C=25^\circ\text{C}$	20	
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		110		V
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =100μA; I _E =0		120		V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =100μA; I _C =0		5		V
V _{CEsat}	Collector-emitter saturation voltage	I _C =1A; I _B =0.2A			0.7	V
V _{BEsat}	Base-emitter saturation voltage	I _C =1A; I _B =0.2A			1.3	V
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			1.0	μA
I _{EBO}	Emitter cut-off current	V _{EB} =3V; I _C =0			1.0	μA
h _{FE}	DC current gain	I _C =150mA; V _{CE} =5V	100			

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PACKAGE OUTLINE

