

Silicon NPN Power Transistors

2SD1180

DESCRIPTION

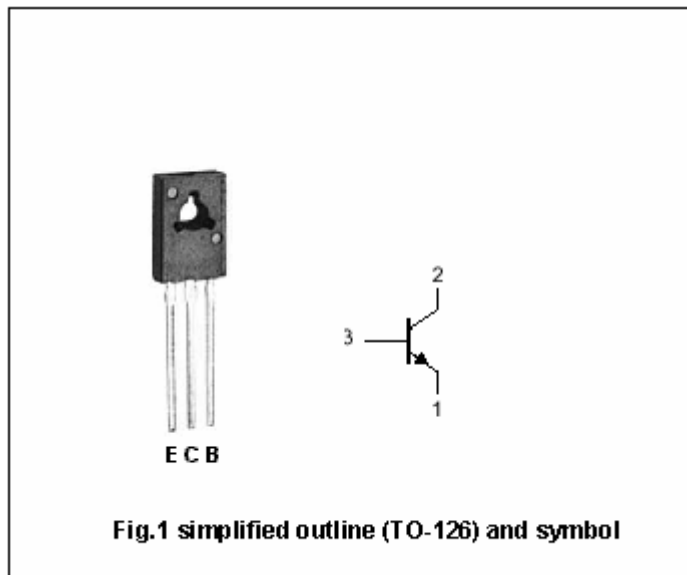
- With TO-126 package
- Low collector saturation voltage

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

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=10mA; I_B=0$		110		V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A; I_E=0$		120		V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu A; I_C=0$		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

