

Silicon NPN Power Transistors

2SD1376

DESCRIPTION

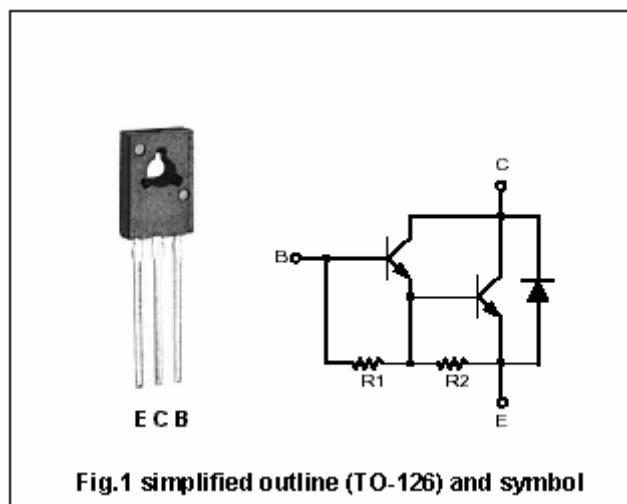
- With TO-126 package
- DARLINGTON
- Complement to type 2SB1012

APPLICATIONS

- For low frequency power amplifier applications

PINNING(see Fig.2)

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



Absolute maximum ratings(Ta=25°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	7	V
I_C	Collector current		1.5	A
I_{CM}	Collector current-peak		3.0	A
P_C	Collector power dissipation	$T_C=25^\circ C$	20	W
T_j	Junction temperature		150	°C
T_{stg}	Storage temperature		-55~150	°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; R _{BE} =∞	120			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =50mA ; I _C =0	7			V
V _{CEsat-1}	Collector-emitter saturation voltage	I _C =1.0A ; I _B =1mA			1.5	V
V _{CEsat-2}	Collector-emitter saturation voltage	I _C =1.5A ; I _B =1.5mA			2.0	V
V _{BEsat-1}	Base-emitter saturation voltage	I _C =1.0A ; I _B =1mA			2.0	V
V _{BEsat-2}	Base-emitter saturation voltage	I _C =1.5A ; I _B =1.5mA			2.5	V
I _{CEO}	Collector cut-off current	V _{CE} =100V; R _{BE} =∞			10	μ A
I _{CBO}	Collector cut-off current	V _{CB} =120V; I _E =0			100	μ A
h _{FE}	DC current gain	I _C =1A ; V _{CE} =3V	2000		30000	
V _D	Diode forward voltage	I _D =1.5A			3.0	V
t _{on}	Turn-on time	I _C =1A ; I _{B1} =-I _{B2} =1mA		0.5		μ s
t _{off}	Turn-off time			2.0		μ s

