

Silicon PNP Power Transistors

BD190

DESCRIPTION

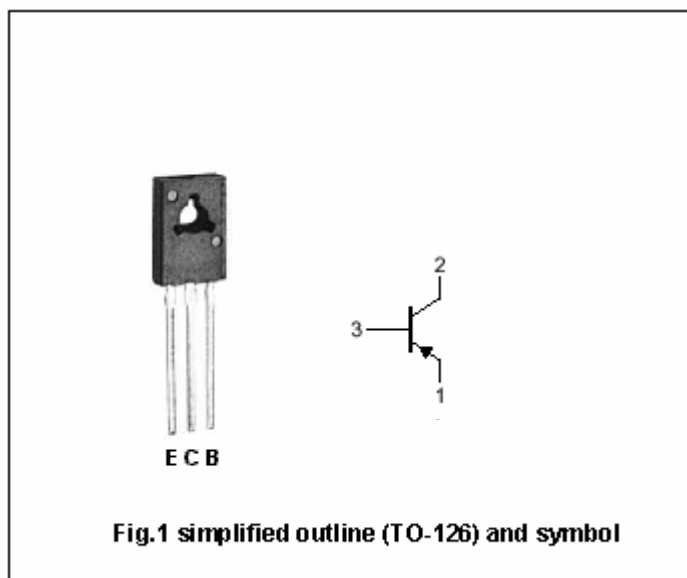
- With TO-126 package
- High current
- Complement to type BD189

APPLICATIONS

- For use in 5 to 10 watt audio amplifiers utilizing complementary or quasi complementary circuits.

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_{CB0}	Collector-base voltage	Open emitter	-70	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current (DC)		-4	A
I_B	Base current		-2	A
P_t	Total power dissipation	$T_{mb} \ 70$	40	W
T_j	Junction temperature		-65~150	
T_{stg}	Storage temperature		-65~150	

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j-a}$	Thermal resistance, junction to case	3.12	/W

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CHARACTERISTICS

T_j=25 unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(SUS)CEO}	Collector-emitter sustaining voltage	I _C =-0.1A; I _B =0	-60			V
V _{CEsat}	Collector-emitter saturation voltage	I _C =-2.0A; I _B =-0.2A			-1.0	V
V _{BE}	Base-emitter on voltage	I _C =-2A; V _{CE} =-2V			-1.5	V
I _{CBO}	Collector cut-off current	V _{CB} =-70V; I _E =0			-0.1	mA
I _{EBO}	Emitter cut-off current	V _{EB} =-5V; I _C =0			-1.0	mA
h _{FE-1}	DC current gain	I _C =-0.5A; V _{CE} =-2V	40			
h _{FE-2}	DC current gain	I _C =-2A; V _{CE} =-2V	15			
f _T	Transition frequency	I _C =-1.0A; V _{CE} =-10V; f=1.0MHz	2.0			MHz

