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.

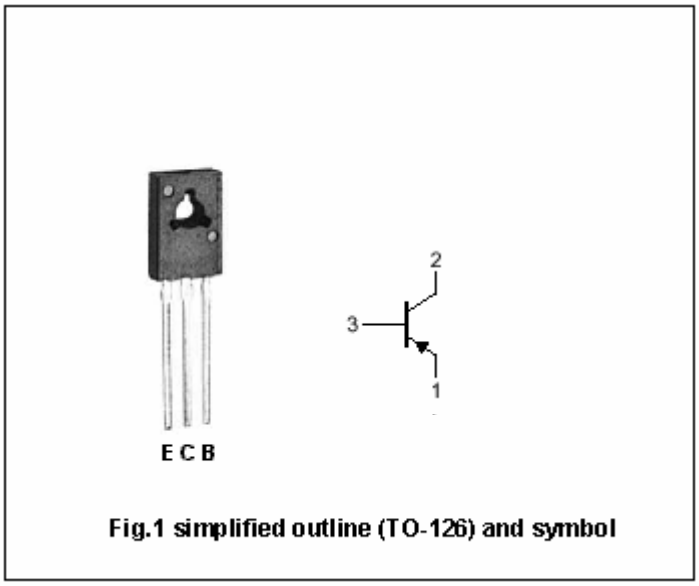

Fig.1 simplified outline (TO-126) and symbol

PINNING

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

Absolute maximum ratings (Ta=25□)

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

CHARACTERISTICS

Tj=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

PACKAGE OUTLINE

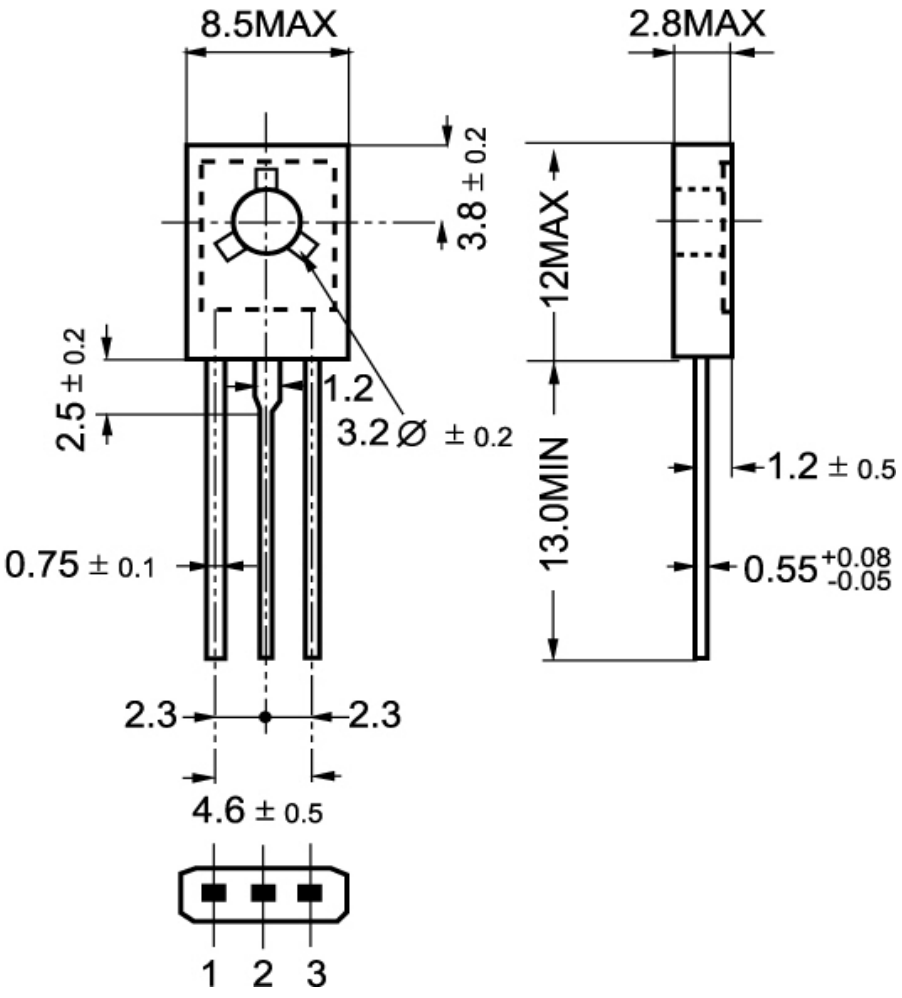

Fig.2 Outline dimensions