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

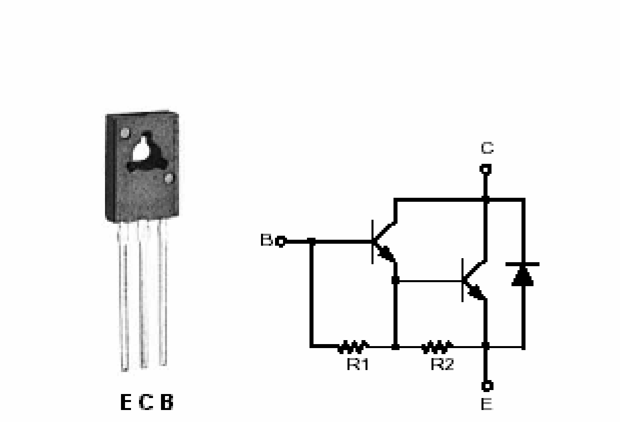

Fig.1 simplified outline (TO-126) and symbol

Absolute maximum ratings(Ta=25□)

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□	20	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-55~150	□

CHARACTERISTICS

Tj=25℃ 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	μA
I_{CBO}	Collector cut-off current	V_{CB}=120V; I_E=0			100	μA
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		μs
t_{off}	Turn-off time			2.0		μs

PACKAGE OUTLINE

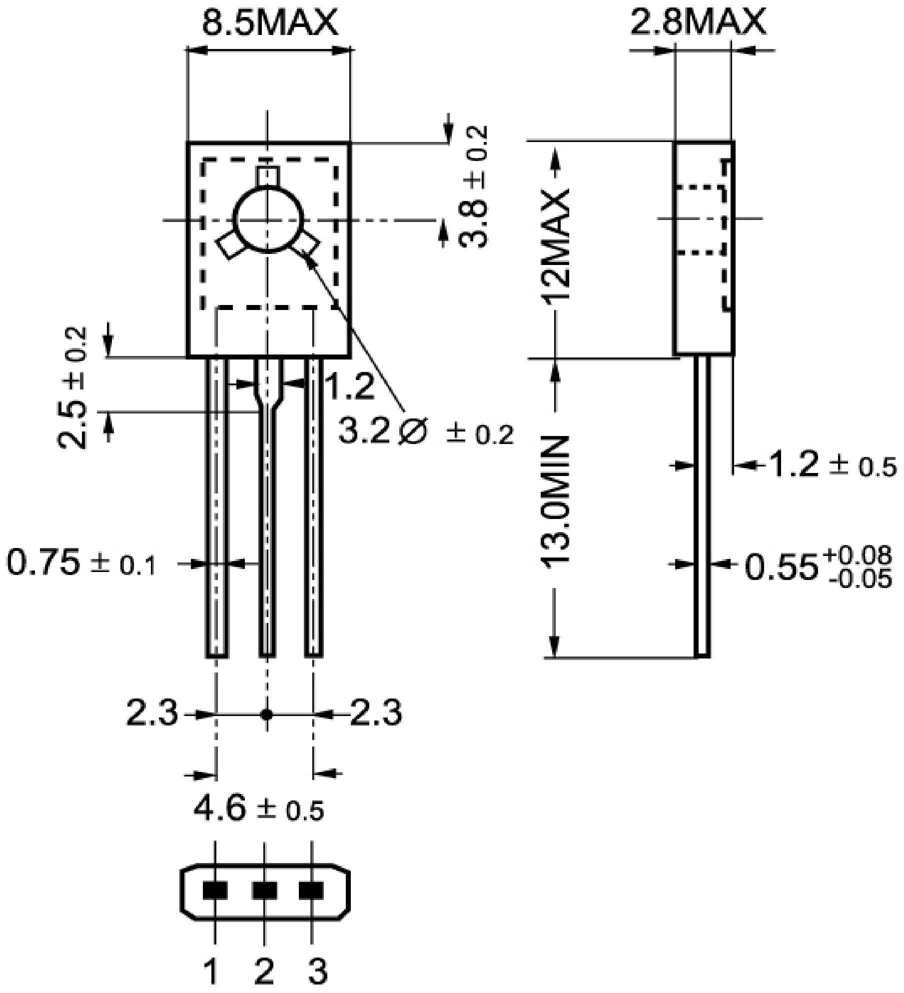

Fig.2 Outline dimensions