Silicon PNP Power Transistors 2N4918 2N4919 2N4920

DESCRIPTION

- With TO-126 package
- Complement to type 2N4921/4922/4923
- Excellent safe operating area
- Low collector saturation voltage

APPLICATIONS

- For driver circuits ,switching ,and amplifier applications

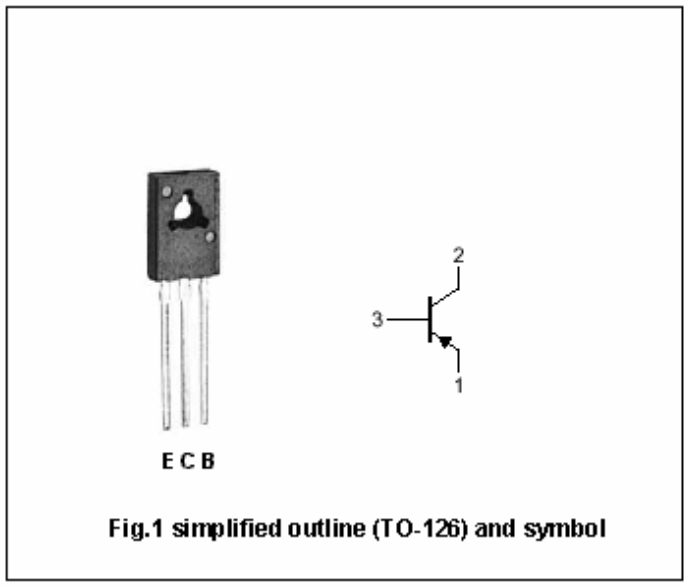

Fig.1 simplified outline (TO-126) and symbol

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	2N4918	Open emitter	-40	V
		2N4919		-60	
		2N4920		-80	
V_{CEO}	Collector-emitter voltage	2N4918	Open base	-40	V
		2N4919		-60	
		2N4920		-80	
V_{EBO}	Emitter-base voltage		Open collector	-5	V
I_C	Collector current			-1	A
I_{CM}	Collector current-Peak			-3	A
I_B	Base current			-1	A
P_D	Total power dissipation		T_C=25℃	30	W
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	VALUE	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	4.16	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	2N4918	I_C=-0.1A; I_B=0	-40			V
		2N4919		-60			
		2N4920		-80			
V_{CEsat}	Collector-emitter saturation voltage		I_C=-1.0A ;I_B=-0.1A			-0.6	V
V_{BEsat}	Base-emitter saturation voltage		I_C=-1.0A ;I_B=-0.1A			-1.3	V
V_{BE}	Base-emitter on voltage		I_C=-1A ; V_{CE}=-1V			-1.3	V
I_{CEO}	Collector cut-off current	2N4918	V_{CE}=-20V; I_B=0			-0.5	mA
		2N4919	V_{CE}=-30V; I_B=0				
		2N4920	V_{CE}=-40V; I_B=0				
I_{CBO}	Collector cut-off current		V_{CB}= Rated V_{CBO} ;I_E=0			-0.1	mA
I_{CEX}	Collector cut-off current		V_{CE}= Rated V_{CEO}; $V_{BE(off)}$=1.5V T_C=125℃			-0.1 -0.5	mA
I_{EBO}	Emitter cut-off current		V_{EB}=-5V; I_C=0			-1.0	mA
h_{FE-1}	DC current gain		I_C=-50mA ; V_{CE}=-1V	40			
h_{FE-2}	DC current gain		I_C=-500mA ; V_{CE}=-1V	30		150	
h_{FE-3}	DC current gain		I_C=-1A ; V_{CE}=-1V	10			
f_T	Transition frequency		I_C=-250mA ; V_{CE}=-10V;f=1MHz	3.0			MHz
C_{OB}	Output capacitance		f=100kHz ; V_{CB}=-10V;I_E=0			100	pF

PACKAGE OUTLINE

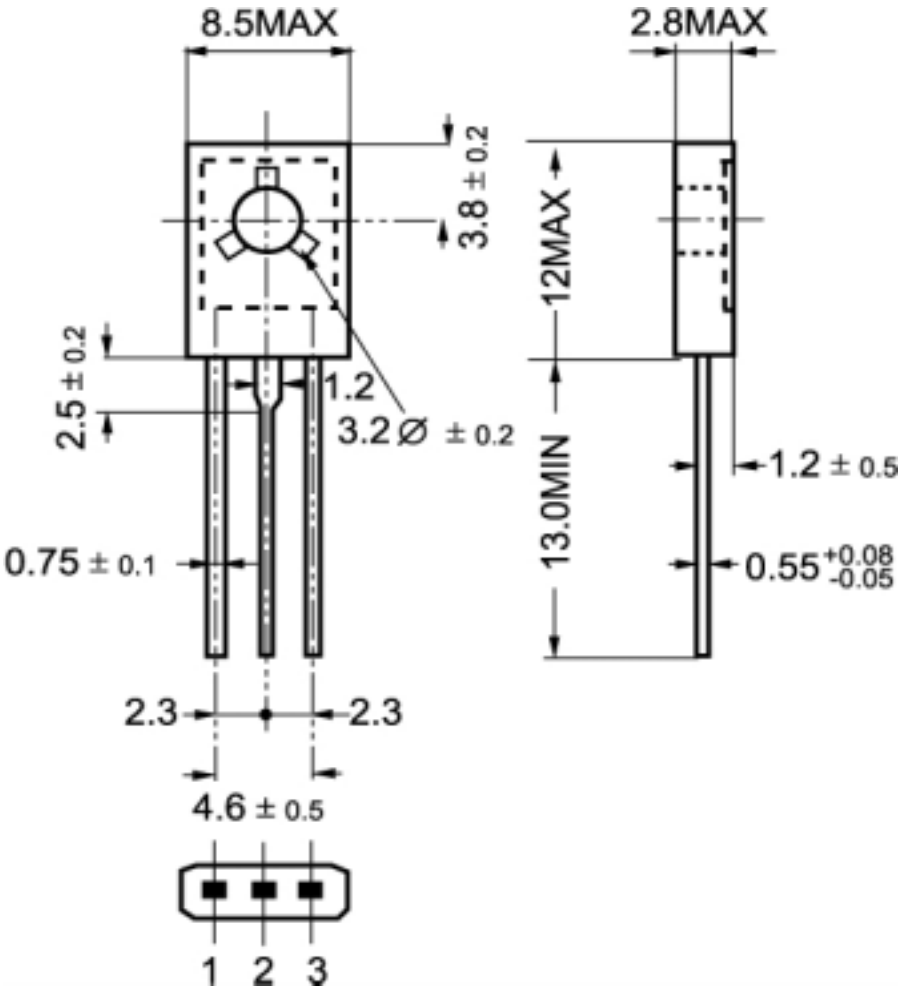

Fig.2 Outline dimensions