

Silicon PNP Power Transistors

2SA1142

DESCRIPTION

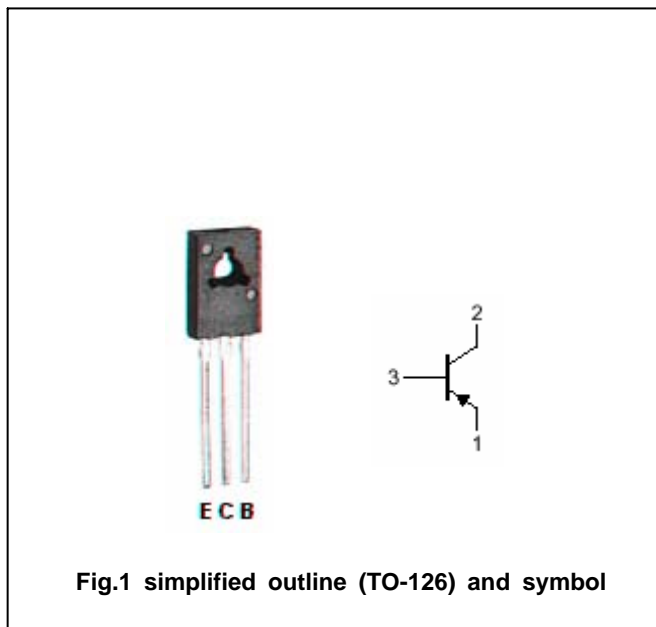
- With TO-126 package
- Complement to type 2SC2682

APPLICATIONS

- Audio frequency power amplifier; high frequency power amplifier applications

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	-180	V
V _{CEO}	Collector-emitter voltage	Open base	-180	V
V _{EBO}	Emitter-base voltage	Open collector	-5	V
I _C	Collector current		-0.1	A
P _C	Collector power dissipation	T _a =25	1.2	W
		T _C =25	8	
T _j	Junction temperature		150	
T _{stg}	Storage temperature		-55~150	

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CHARACTERISTICS

 $T_j=25$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V_{CEsat}	Collector-emitter saturation voltage	$I_C=-50mA; I_B=-5mA$		-0.16	-0.5	V
V_{BEsat}	Base-emitter saturation voltage	$I_C=-50mA; I_B=-5mA$		-0.8	-1.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=-180V; I_E=0$			-1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=-3V; I_C=0$			-1	μA
h_{FE-1}	DC current gain	$I_C=-1mA; V_{CE}=-5V$	90	200		
h_{FE-2}	DC current gain	$I_C=-10mA; V_{CE}=-5V$	100	200	320	
f_T	Transition frequency	$I_C=-20mA; V_{CE}=-10V$		180		MHz
C_{ob}	Output capacitance	$I_E=0; V_{CB}=-10V; f=1MHz$		4.5		pF

◆ h_{FE-2} Classifications

O	Y
100-200	160-320

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PACKAGE OUTLINE

