

## isc Silicon PNP Transistor

## 2SB624

## DESCRIPTION

- SOT-23 plastic-encapsulate transistors
- High DC current gain:  $h_{FE}=200$ (TYP)  
@ $V_{CE} = -1V$ ,  $I_C = -100mA$
- Complementary to 2SD596
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- Designed for audio frequency general purpose amplifier

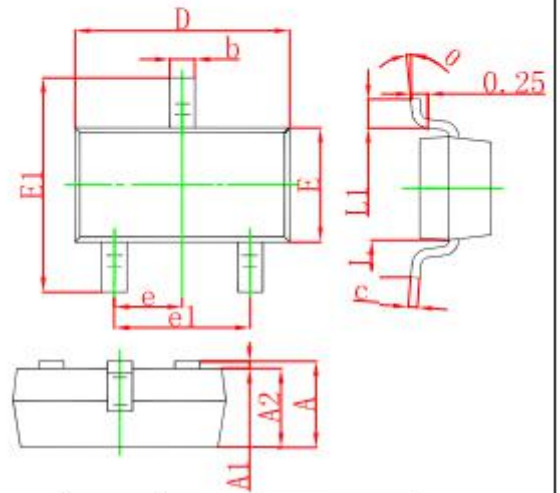
ABSOLUTE MAXIMUM RATINGS( $T_a=25^{\circ}C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-30	V
$V_{CEO}$	Collector-Emitter Voltage	-25	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current-Continuous	-0.7	A
$P_C$	Collector Power Dissipation @ $T_C=25^{\circ}C$	0.2	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55~150	$^{\circ}C$



SOT-23 package

- 1: Base  
2: Emitter  
3: Collector



DIM	mm	
	MIN	MAX
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95	
e1	1.80	2.00
L	0.55	
L1	0.30	0.50

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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -30V; I <sub>E</sub> = 0			-0.1	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = -5V; I <sub>C</sub> = 0			-0.1	μ A
h <sub>FE-1</sub>	DC Current Gain	I <sub>C</sub> = -100mA; V <sub>CE</sub> = -1V	110		400	
h <sub>FE-2</sub>	DC Current Gain	I <sub>C</sub> = -700mA; V <sub>CE</sub> = -1V	50			
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = -10mA; V <sub>CE</sub> = -6V		160		MHz
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -700mA; I <sub>B</sub> = -70mA			-0.6	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -10mA; V <sub>CE</sub> = -6V	-0.6		-0.7	V

◆ h<sub>FE-1</sub> Classification

Marking	BV1	BV2	BV3	BV4	BV5
h <sub>FE</sub>	110-180	135-220	170-270	200-320	250-400

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