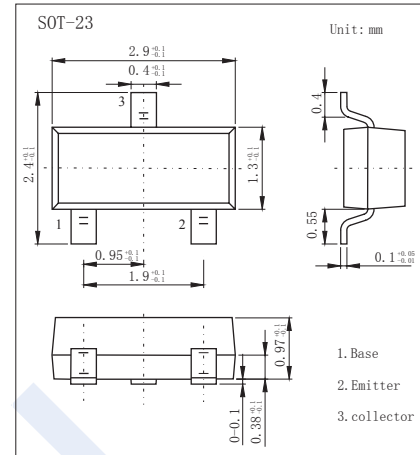


## PNP Transistors

### 2SB624-HF

#### ■ Features

- High DC current gain.  $h_{FE}$ :200 TYP.( $V_{CE}=-1V, I_C=-100mA$ )
- Complimentary to 2SD596-HF.
- Pb-Free Package May be Available. The G-Suffix Denotes a Pb-Free Lead Finish



#### ■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CBO}$	-30	V
Collector - Emitter Voltage	$V_{CEO}$	-25	
Emitter - Base Voltage	$V_{EBO}$	-5	
Collector Current - Continuous	$I_C$	-700	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature range	$T_{stg}$	-55 to 150	

#### ■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CBO}$	$I_C = -100 \mu A, I_E = 0$	-30			V
Collector- emitter breakdown voltage	$V_{CEO}$	$I_C = -1 mA, I_B = 0$	-25			
Emitter - base breakdown voltage	$V_{EBO}$	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -30 V, I_E = 0$			-100	nA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5 V, I_C = 0$			-100	
Collector-emitter saturation voltage (Note.1)	$V_{CE(sat)}$	$I_C = -700 mA, I_B = -70 mA$			-0.6	V
Base - emitter saturation voltage (Note.1)	$V_{BE(sat)}$	$I_C = -700 mA, I_B = -70 mA$			-1.2	
Base - emitter voltage (Note.1)	$V_{BE}$	$V_{CE} = -6V, I_C = -10mA$	-0.6		-0.7	
DC current gain (Note.1)	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	110		400	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -700mA$	50			
Collector output capacitance	$C_{ob}$	$V_{CB} = -6V, I_E = 0, f = 1MHz$		17		pF
Transition frequency	$f_T$	$V_{CE} = -6V, I_C = -10mA$		160		MHz

Note.1:Pulse test : Pulse width  $\leq 350\mu s$ , Duty Cycle  $\leq 2\%$ .

#### ■ Classification of $h_{FE(1)}$

Type	2SB624-BV1-HF	2SB624-BV2-HF	2SB624-BV3-HF	2SB624-BV4-HF	2SB624-BV5-HF
Range	110-180	135-220	170-270	200-320	250-400
Marking	BV1 <sub>F</sub>	BV2 <sub>F</sub>	BV3 <sub>F</sub>	BV4 <sub>F</sub>	BV5 <sub>F</sub>