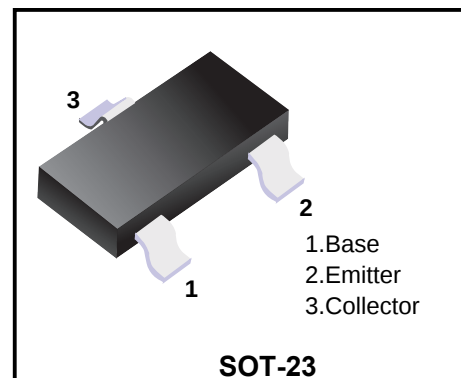


Features

- High DC current gain. h_{FE} :200 TYP. ($V_{CE}=-1V, I_C=-100mA$)
- Complimentary to 2SD596.



Absolute Maximum Ratings ($T_a=25^{\circ}C$)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-30	V
Collector - Emitter Voltage	V_{CE0}	-25	
Emitter - Base Voltage	V_{EB0}	-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 ($T_a=25^{\circ}C$ unless otherwise specified.)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = -100 \mu A, I_E = 0$	-30			V
Collector- emitter breakdown voltage	V_{CE0}	$I_C = -1 mA, I_B = 0$	-25			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -30 V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -5 V, I_C = 0$			-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}	$V_{CE} = -6 V, I_C = -10 mA$	-0.6		-0.7	
DC current gain (Note.1)	$h_{FE(1)}$	$V_{CE} = -1 V, I_C = -100 mA$	110		400	
	$h_{FE(2)}$	$V_{CE} = -1 V, I_C = -700 mA$	50			
Collector output capacitance	C_{ob}	$V_{CB} = -6 V, I_E = 0, f = 1 MHz$		17		pF
Transition frequency	f_T	$V_{CE} = -6 V, I_C = -10 mA$		160		MHz

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

h_{FE} Classification

Type	2SB624-BV1	2SB624-BV2	2SB624-BV3	2SB624-BV4	2SB624-BV5
Range	110-180	135-220	170-270	200-320	250-400
Marking	BV1	BV2	BV3	BV4	BV5

Ordering information

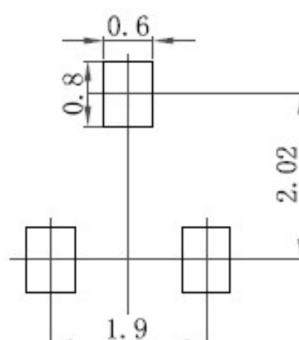
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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