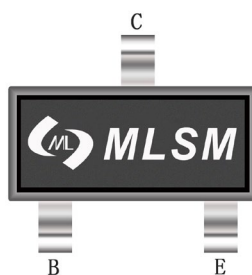
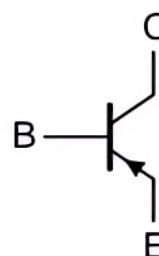


Features

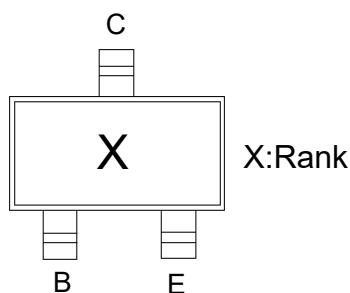
- High DC current gain. h_{FE} :200 TYP.
($V_{CE}=-1V, I_C=-100mA$)
- Complimentary to 2SD596.



SOT-23 top view



Schematic diagram



Marking and pin assignment



Halogen-Free

Maximum Ratings (Ta=25°C unless otherwise noted)

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	-700	mA
P_D	Total Device Dissipation	200	mW
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

Ordering Information (Example)

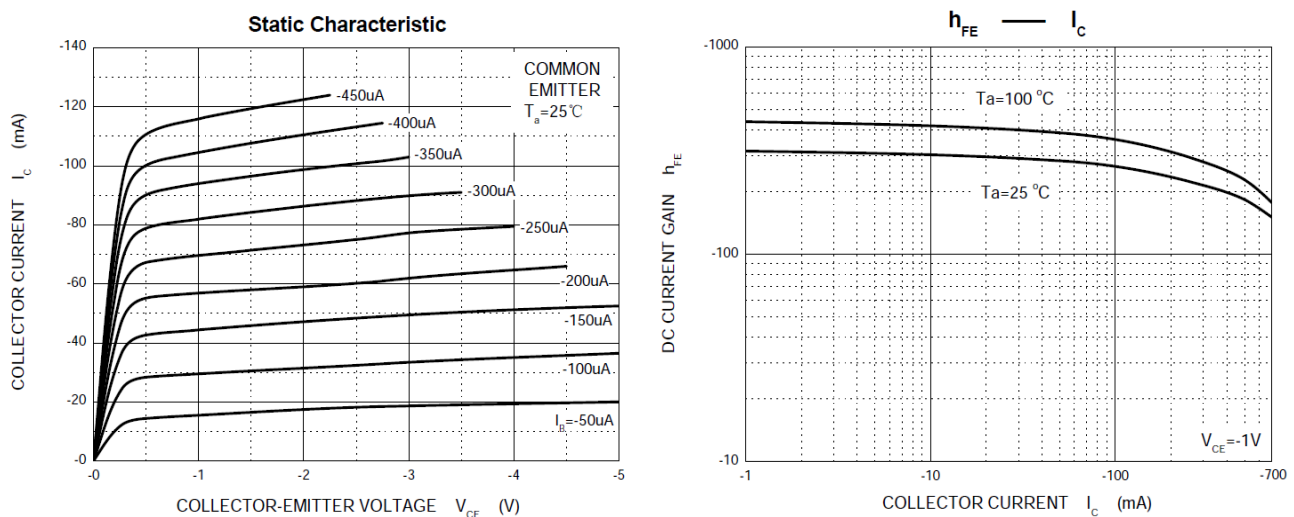
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
2SB624	SOT-23	BV1/BV2/BV3/BV4/BV5	3,000	45,000	180,000	7"reel

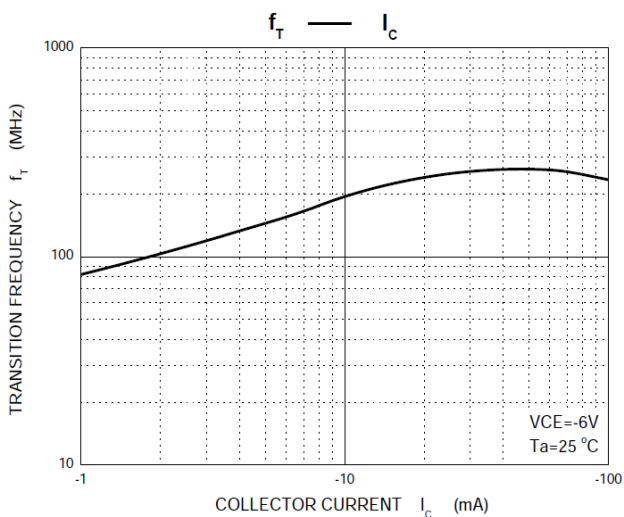
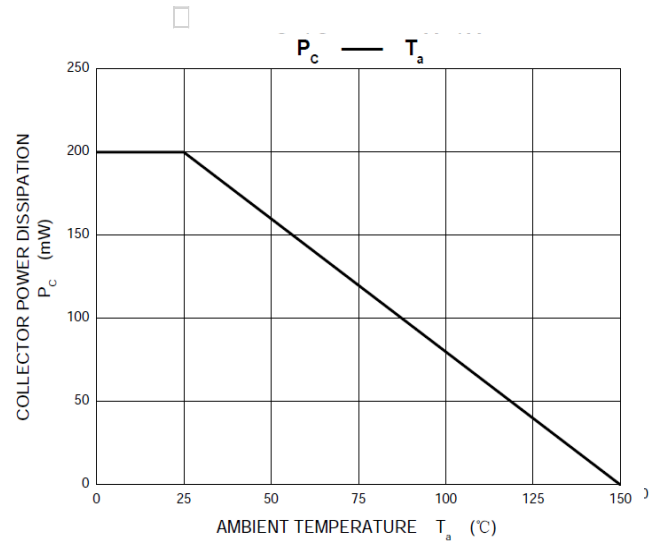
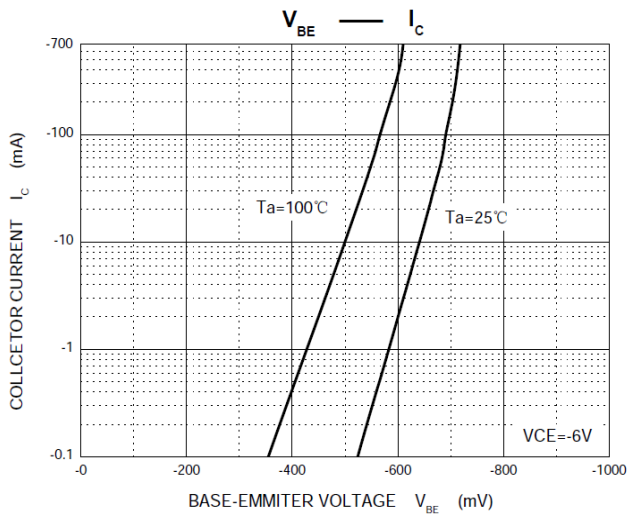
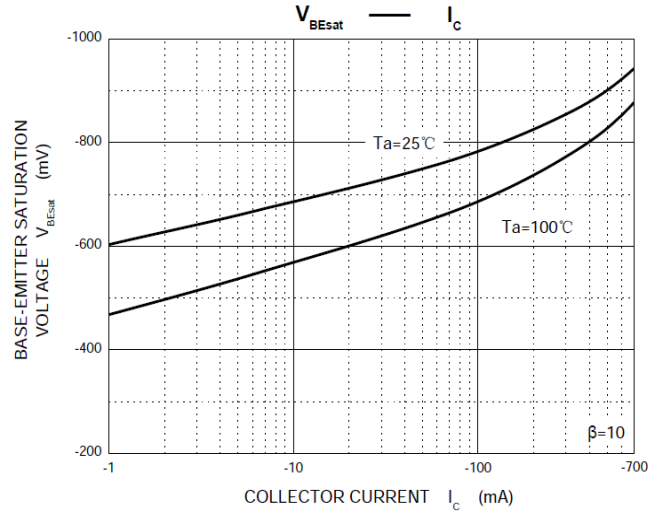
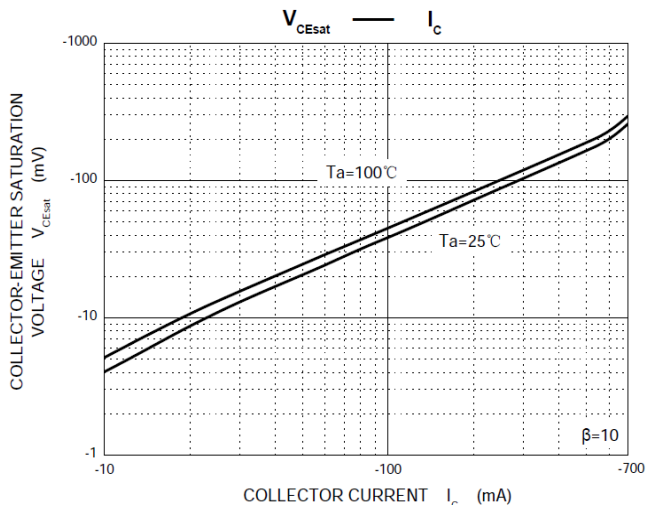
Electrical Characteristics (Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -100\mu A, I_E = 0$	-30	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = -1mA, I_B = 0$	-25	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -100\mu A, I_C = 0$	-5	--	--	V
I_{CBO}	Collector cut-off current	$V_{CB} = -30V, I_E = 0$	--	--	-0.1	μA
I_{EBO}	Emitter cut-off current	$V_{EB} = -5V, I_C = 0$	--	--	-0.1	μA
$H_{FE(1)}^*$	DC current gain	$V_{CE} = -1V, I_C = -100mA$	110	--	400	
$H_{FE(2)}^*$	DC current gain	$V_{CE} = -1V, I_C = -700mA$	50	--	--	
$V_{CE(sat)}^*$	Collector-emitter saturation voltage	$I_C = -700mA, I_B = -70mA$	--	--	-0.6	V
V_{BE}^*	Base-emitter voltage	$V_{CE} = -6V, I_C = -10mA$	-0.6		-0.7	
C_{ob}	Collector output capacitance	$V_{CB} = -6V, I_E = 0, f = 1MHz$	--	17	-	pF
f_T	Transition frequency	$V_{CE} = -6V, I_C = -10mA$	--	160	--	MHz

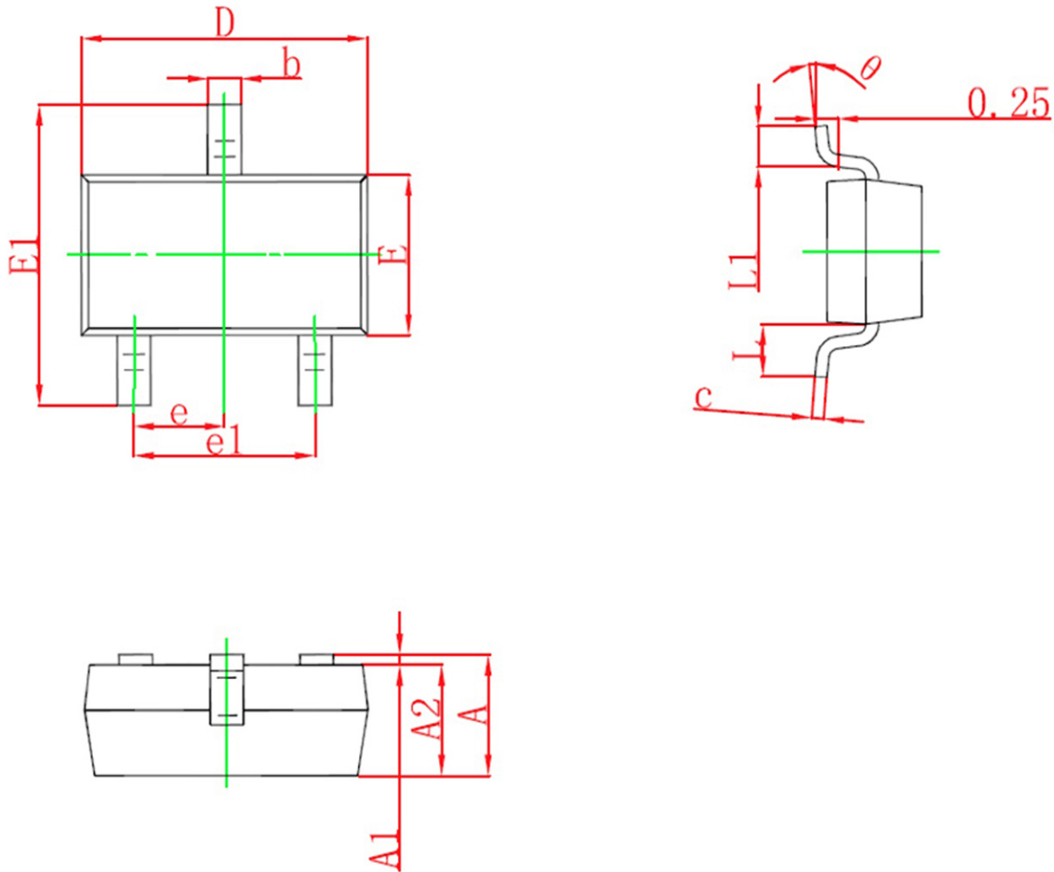
Classification of hFE

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

Typical Operating Characteristics




SOT-23 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°