

FEATURES

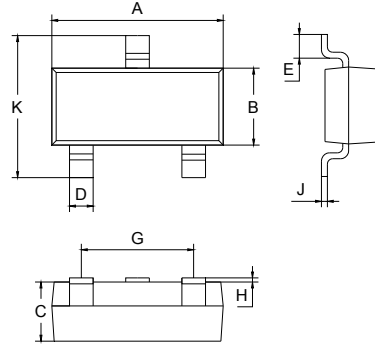
- High DC current gain. h_{FE} : 200TYP
($V_{CE}=-1.0V, I_C=-100mA$)
- Complimentary to the 2SD596.

APPLICATIONS

- Audio frequency amplifier.
- Switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SB624	BV1/BV2/BV3/BV4/BV5	SOT-23



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
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	-700	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

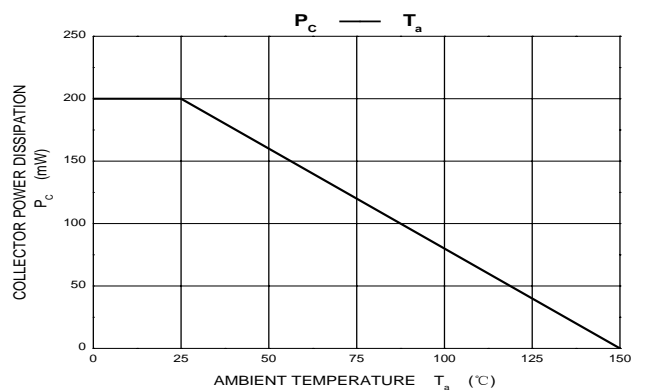
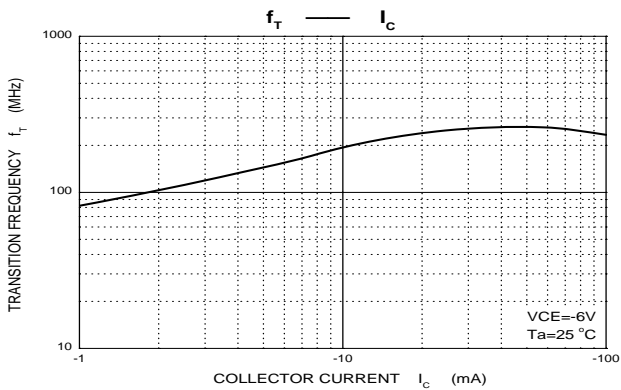
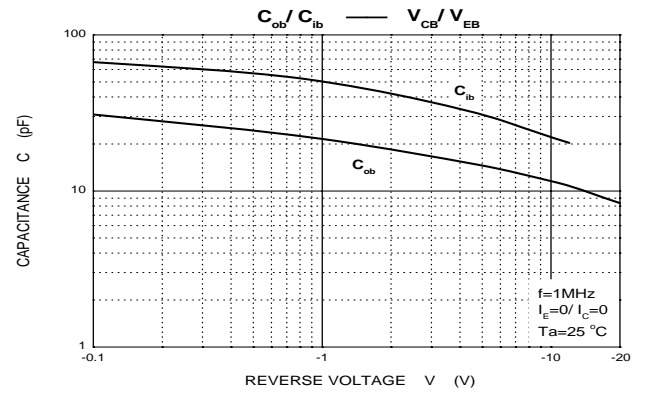
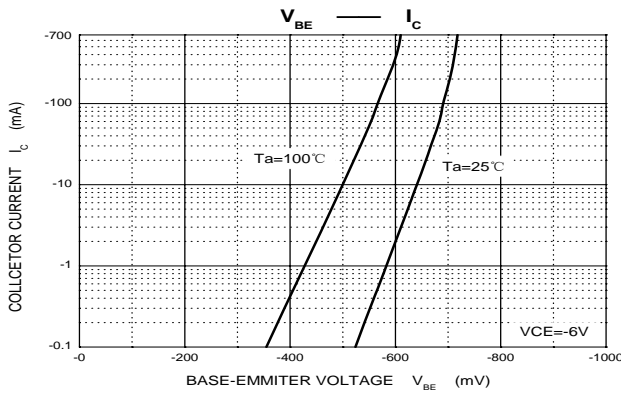
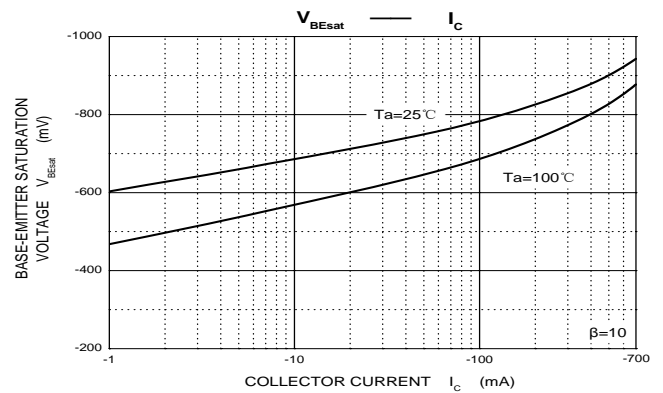
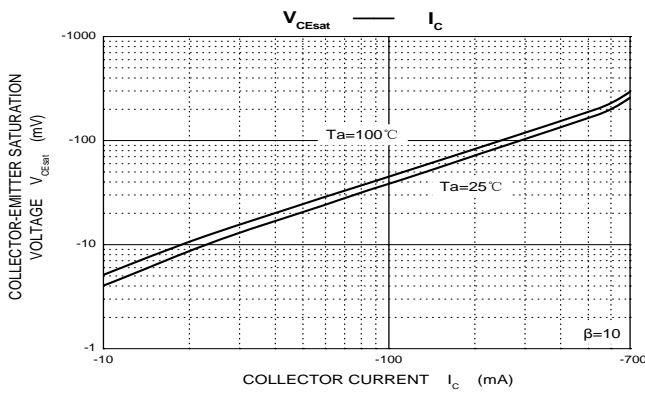
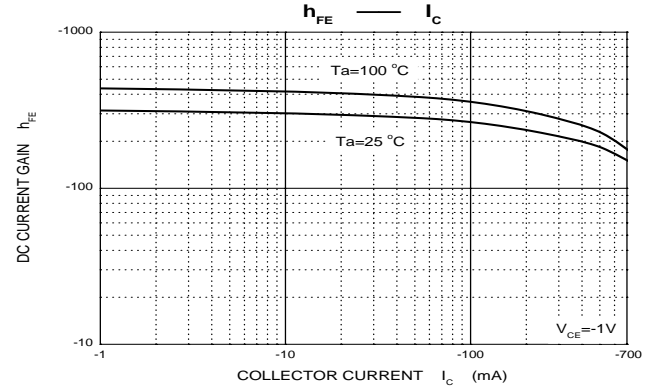
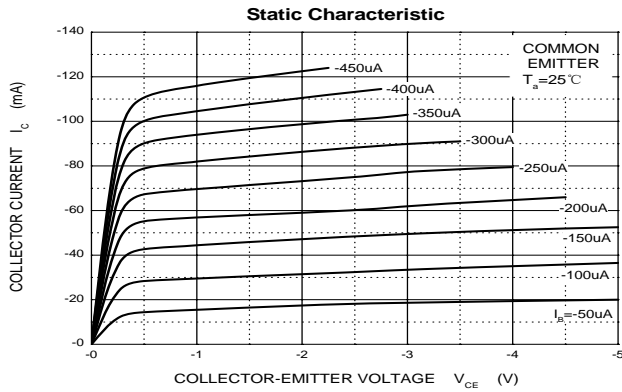
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB}=-30V, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE}=-1V, I_C=-100mA$ $V_{CE}=-1V, I_C=-700mA$	110 50	200	400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-700mA, I_B=-70mA$		-0.25	-0.6	V
Base-emitter voltage	$V_{BE(on)}$	$V_{CE}=-6V, I_C=-10mA$	-0.6	-0.64	-0.7	V
Transition frequency	f_T	$V_{CE}=-6V, I_C=-10mA$		160		MHz
Collector output capacitance	C_{ob}	$V_{CB}=-6V, I_E=0, f=1MHz$		17		pF

CLASSIFICATION OF $h_{FE(1)}$

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



TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220