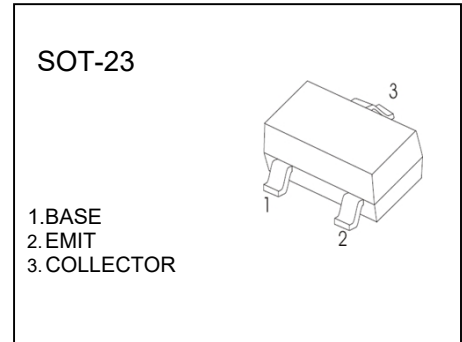


# SOT-23 Plastic-Encapsulate Transistors

## 2SB624 TRANSISTOR (PNP)

### FEATURES

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



### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ 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 -Continuous	-700	mA
$P_D$	Total Device Dissipation	200	mW
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55-150	$^{\circ}C$

### ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}C$ unless otherwise specified)

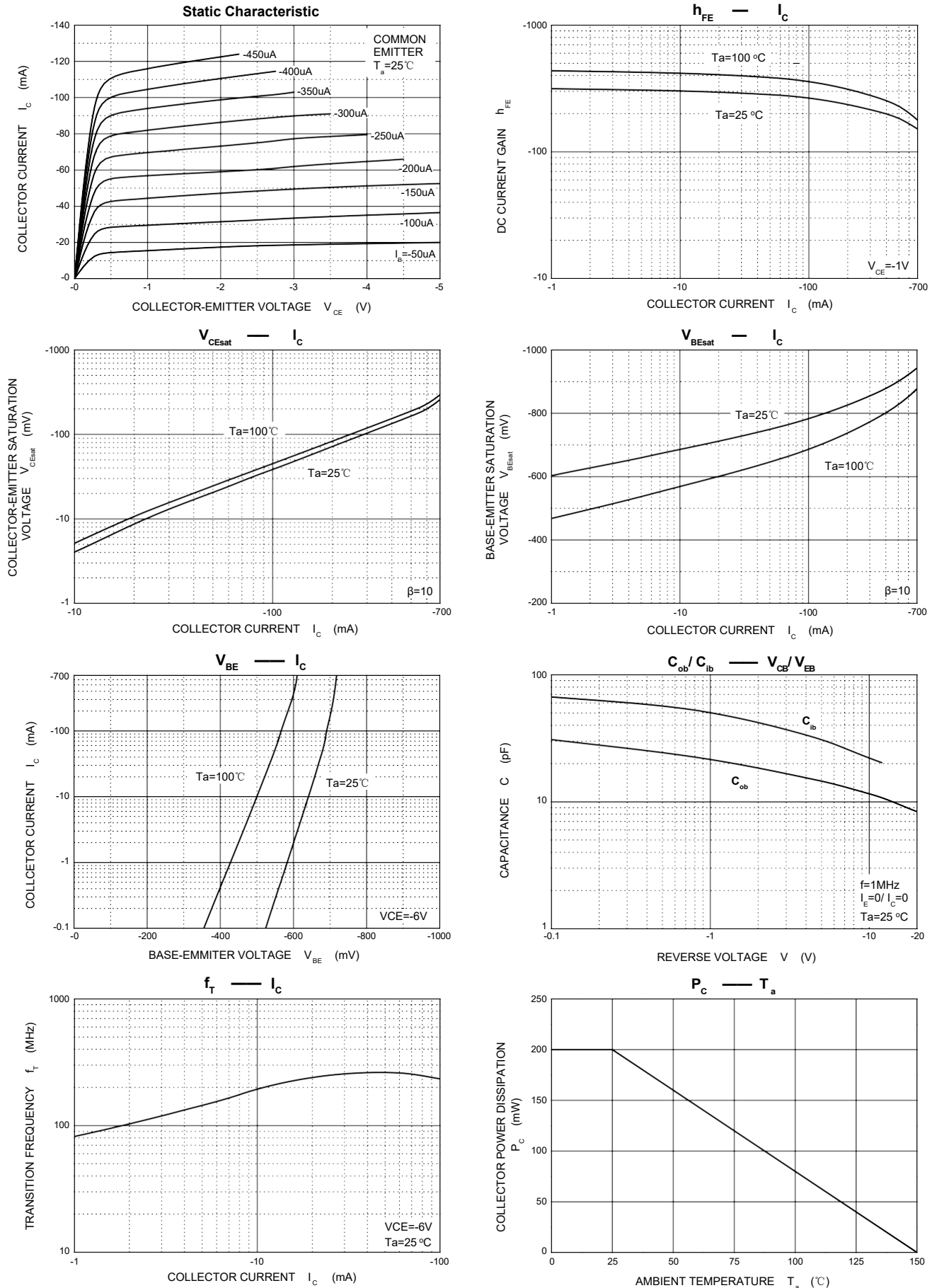
Parameter	Symbol	Test condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-30V, I_E=0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-5V, I_C=0$			-0.1	$\mu A$
DC current gain	$h_{FE(1)}^*$	$V_{CE}=-1V, I_C=-100mA$	110		400	
	$h_{FE(2)}^*$	$V_{CE}=-1V, I_C=-700mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=-700mA, I_B=-70mA$			-0.6	V
Base-emitter voltage	$V_{BE}^*$	$V_{CE}=-6V, I_C=-10mA$	-0.6		-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

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

### CLASSIFICATION OF $h_{FE(1)}$

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

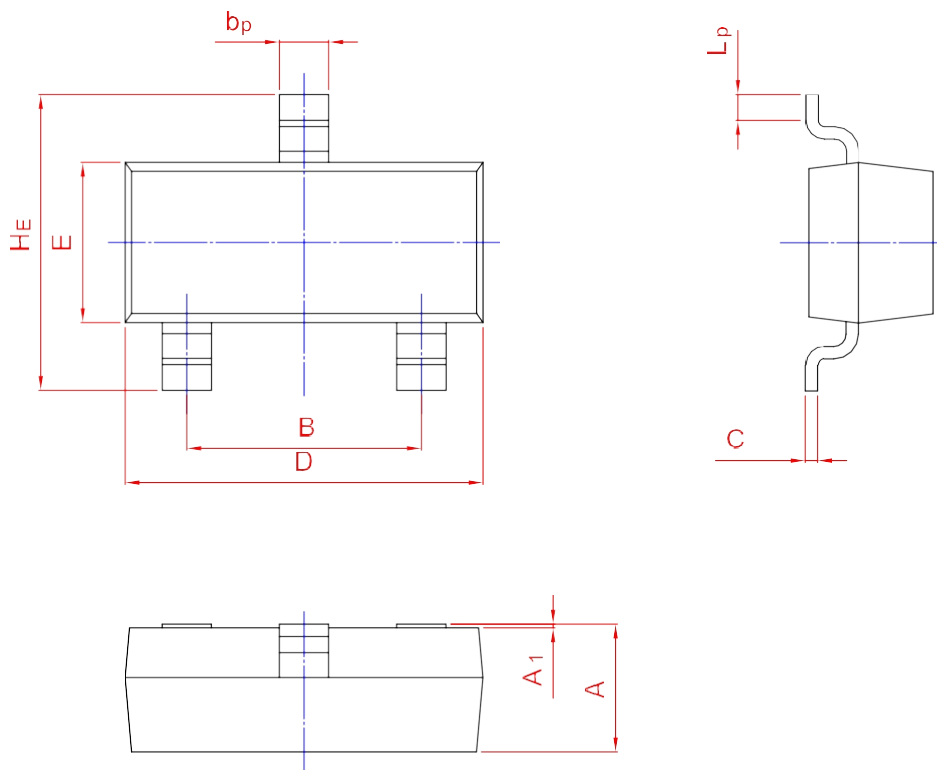
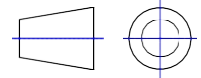
# Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20