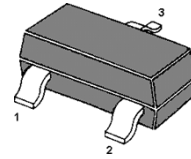


## MMBTSB624 PNP Silicon Epitaxial Planar Transistor

For use in small type equipments, especially recommended or hybrid circuit and other applications

The transistor is subdivided into five groups A, B, C, D and E, according to its DC current gain.



1.Base 2.Emmitter 3.Collector  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	30	V
Collector Emitter Voltage	$-V_{CEO}$	25	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	700	mA
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$

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

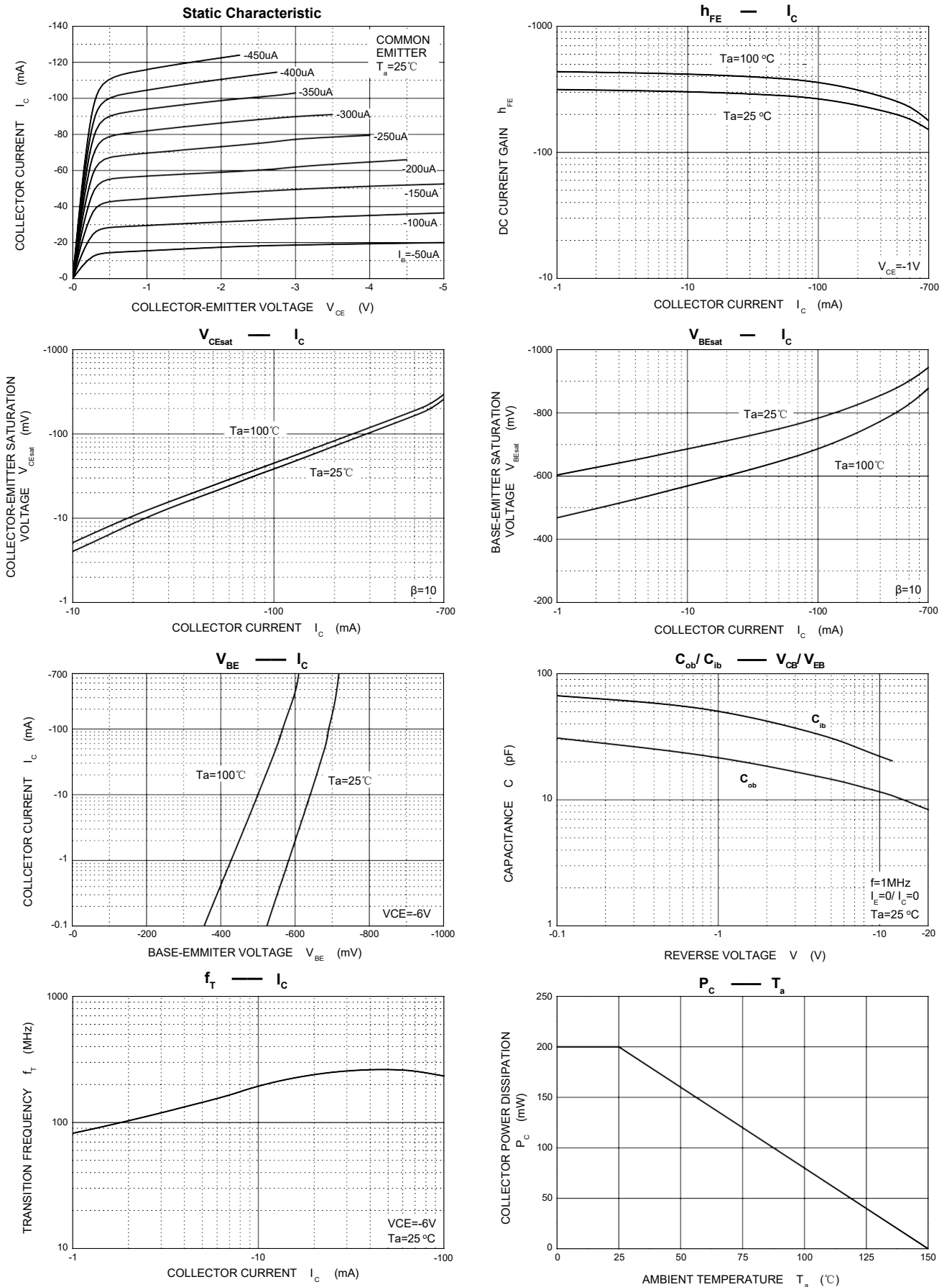
Parameter	Symbol	est conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C= -1\text{mA}, I_B=0$	-25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E= -100\mu\text{A}, I_C=0$	-5			V
Collector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

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

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

Range	A	B	C	D	E
Range	110-180	135-220	170-270	200-320	250-400
Marking	BV1	BV2	BV3	BV4	BV5

# Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23

