



MMBTB624

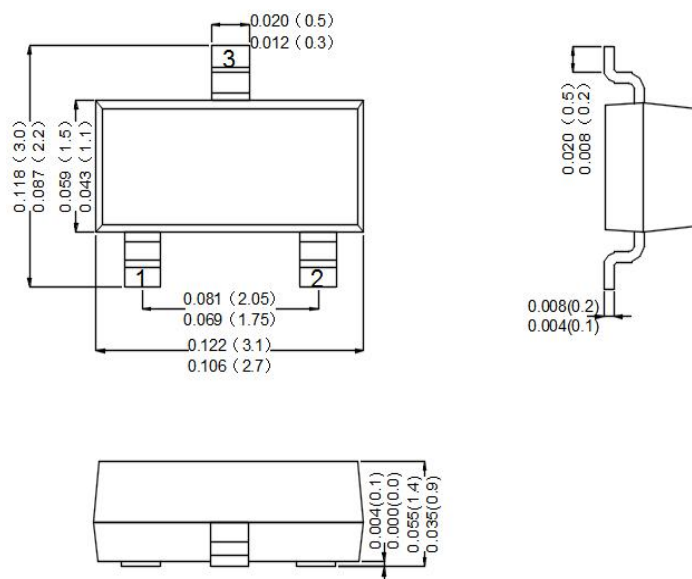
PNP Silicon Epitaxial Planar Transistor

Features

- 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.

Mechanical Data

- Case:Molded Plastic,SOT-23
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.
- Marking: CLASSIFICATION OF $h_{FE(1)}$
- Mounting Position : Any.
- Equivalent Circuit:



Dimensions in inches and (millimeters)

Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

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	°C
Storage Temperature Range	T_s	- 55 to + 150	°C



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Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	est 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	$h_{FE(1)}^*$	$C_E = -1V, I_C = -100mA$	110		400	
	$h_{FE(2)}^*$	$C_E = -1V, I_C = -700mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$C = -700mA, I_B = -70mA$			-0.6	V
Base-emitter voltage	V_{BE}^*	$C_E = -6V, I_C = -10mA$	-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

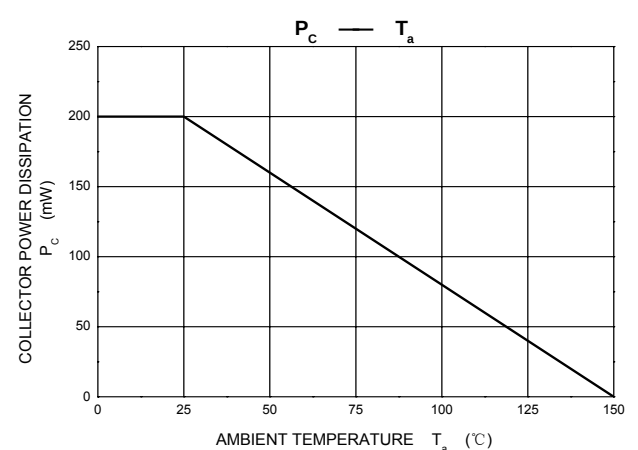
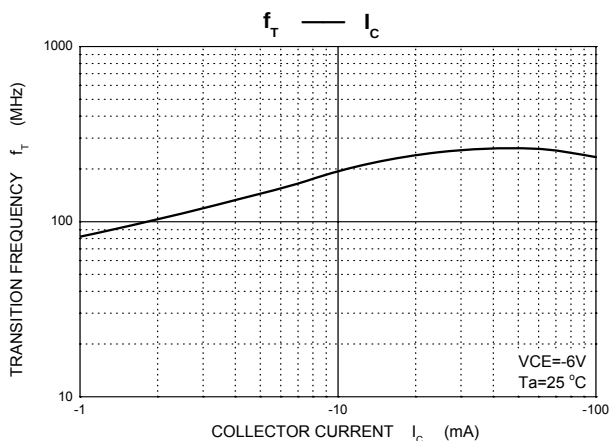
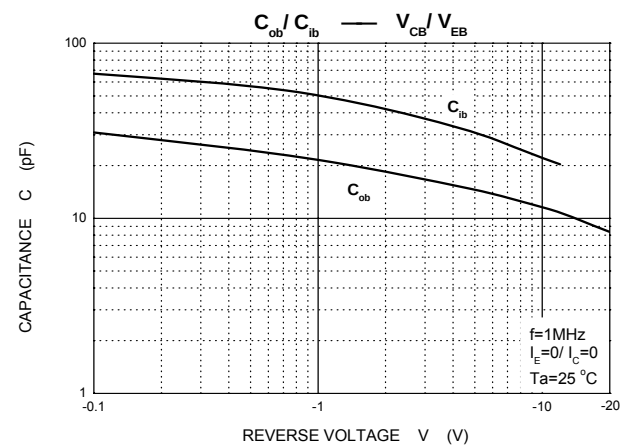
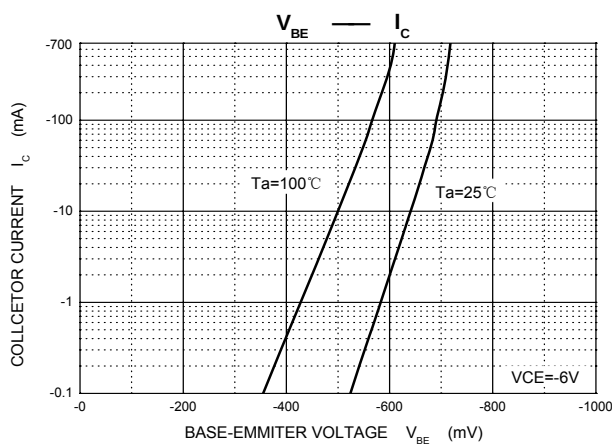
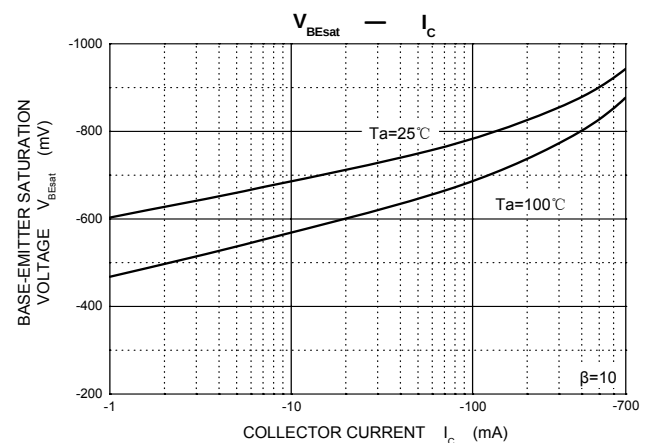
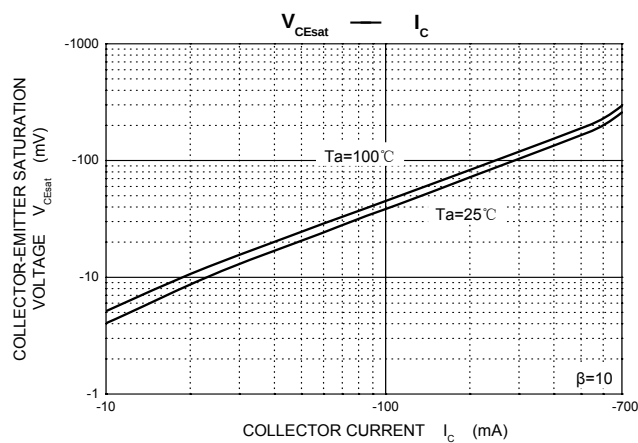
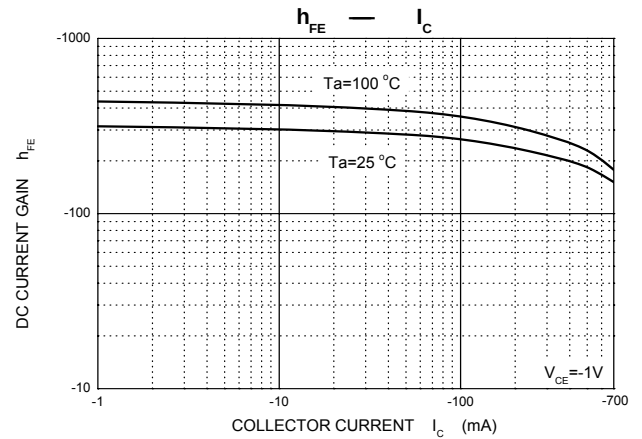
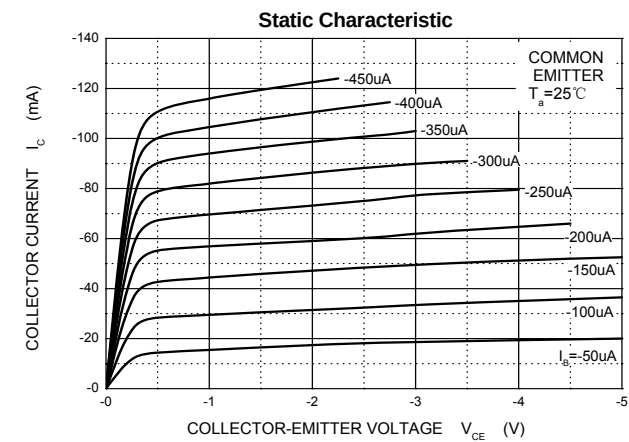
* Pulse test : Pulse width $\leq 350\mu s$, Duty Cycle $\leq 2\%$.

CLASSIFICATION OF $h_{FE(1)}$

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



Rating And Characteristic Curves





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