



MMBTA05

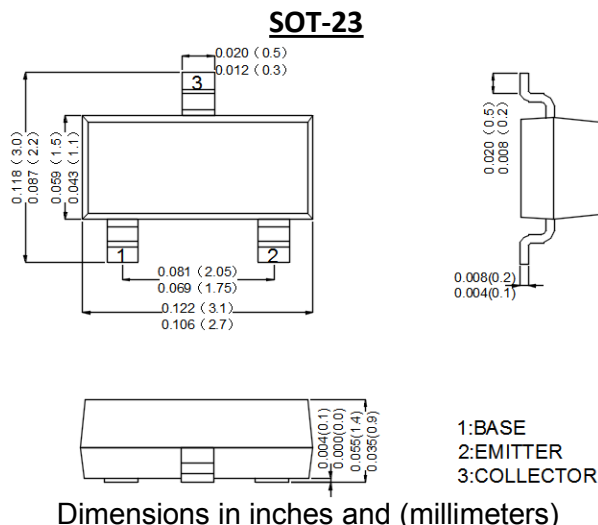
General Purpose PNP Transistor

Features

- Collector Current.(IC= 0.5A).
- Collector Dissipation: PC=0.3W (TC=25° C).
- High Stability and High Reliability.
- General purpose,medium current.
- For linear amplification and switching.
- Available in lead free version.

Mechanical Data

- Case:Molded Plastic,SOT-23 .
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable per MIL-STD-750,Method2026.
- Marking: 1H.
- Mounting Position : Any.



Dimensions in inches and (millimeters)

Maximum Ratings

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	40	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current -Continuous	I_C	0.5	A
Collector Dissipation	P_C	0.3	W
Operating Temperature Range	T_j	150	°C
Storage Temperature Range	T_{STG}	- 55 ~ + 150	°C

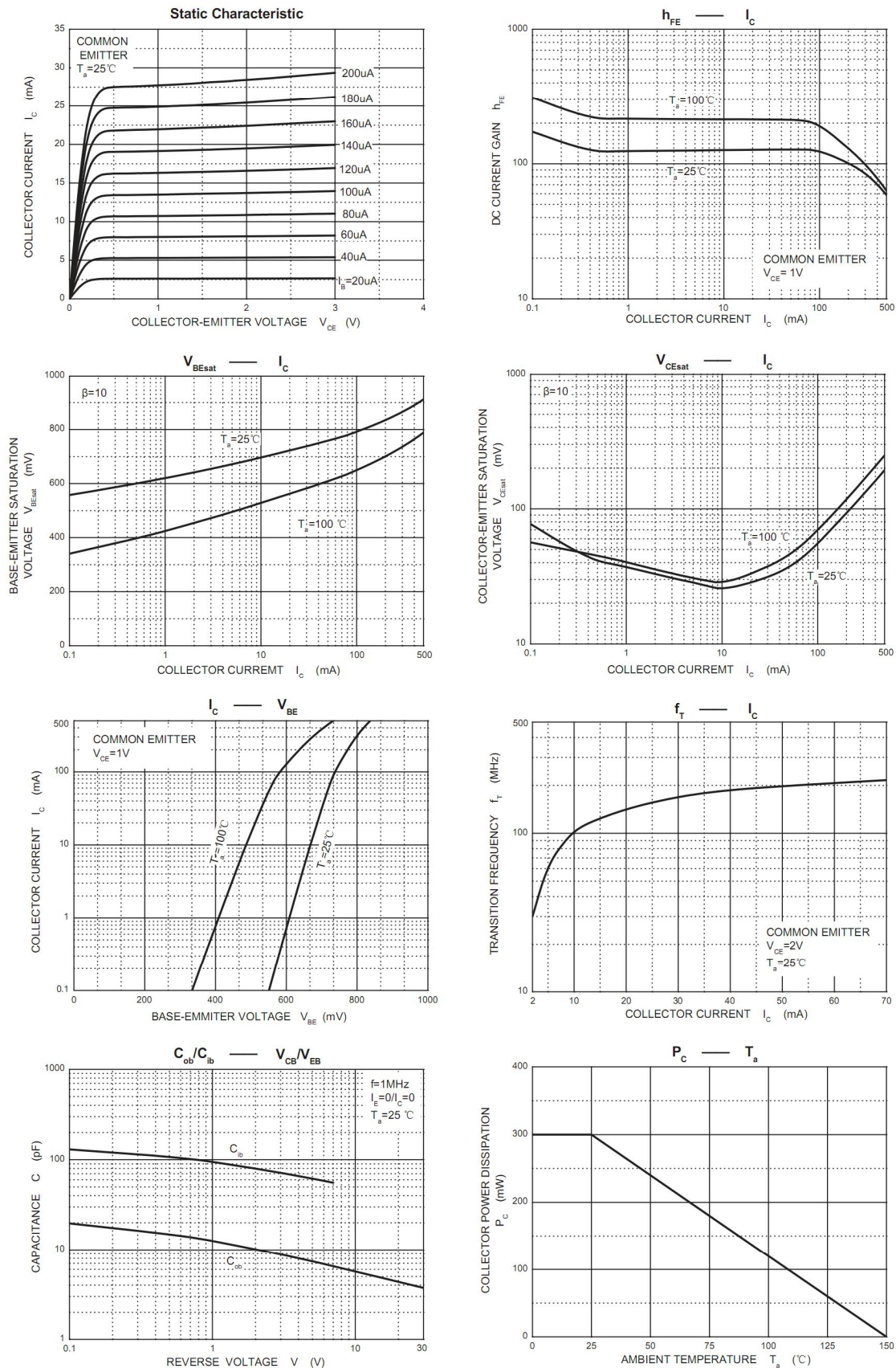
Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	60		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4		V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$		0.1	μA
Collector cut-off current	I_{CEO}	$V_{CE}=60V, I_B=0$		0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=3V, I_C=0$		0.1	μA
DC current gain	h_{FE1}	$V_{CE}=1V, I_C=10mA$	100	400	
DC current gain	h_{FE2}	$V_{CE}=1V, I_C=100mA$	100		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.25	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, V_{CE}=1V$		1.2	V
Transition frequency	f_T	$V_{CE}=2V, I_C=10mA, f=100MHz$	100		MHz



Typical Characteristics





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