



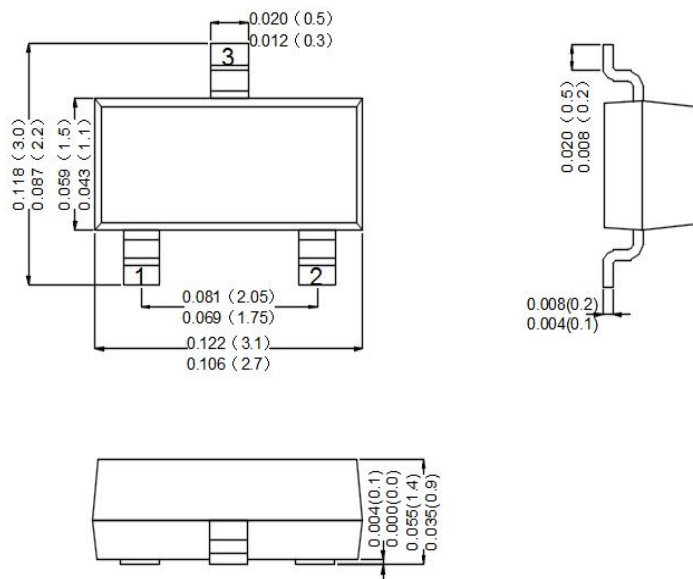
Features

- For low frequency power amplifier and power switching applications
- Low Frequency Power Amplifier Application
- Power Switching Applications

SOT-23

Mechanical Data

- Case: Molded Plastic, SOT-23
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated Leads Solderable per MIL-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	$-I_C$	800	mA
Base Current	$-I_B$	160	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	-55 to +150	°C



MMBTSA1298

PNP Silicon Epitaxial Planar Transistor

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

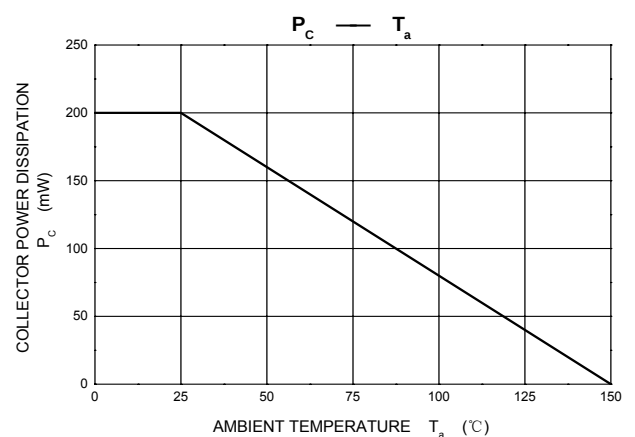
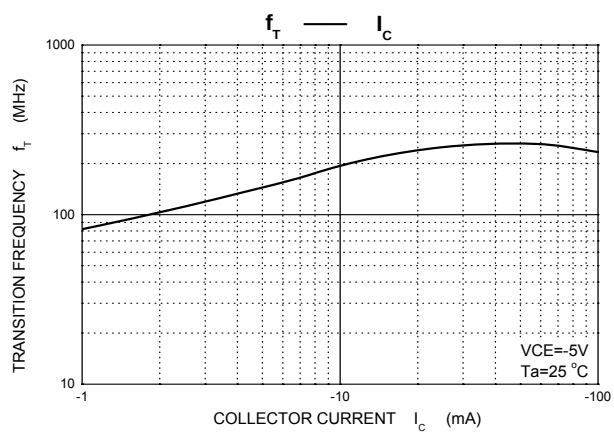
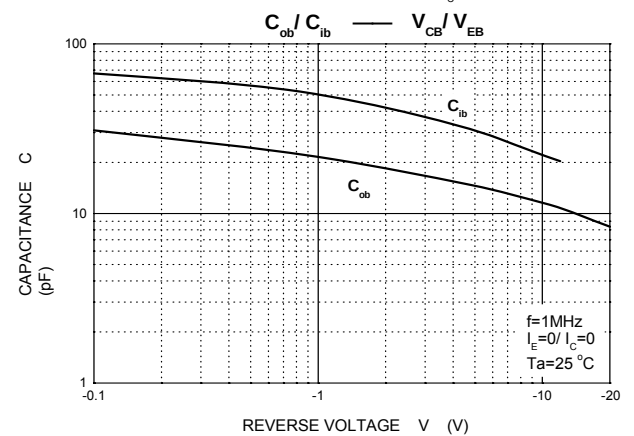
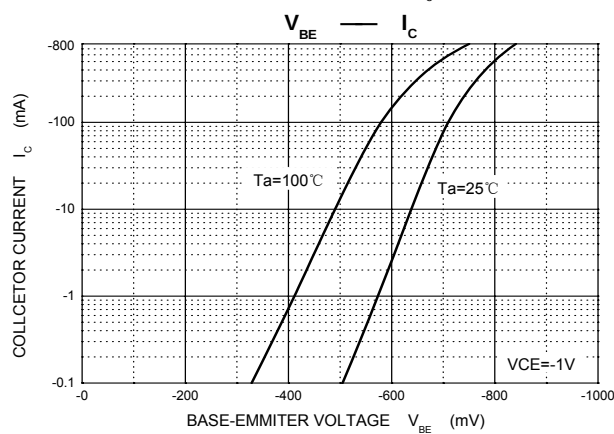
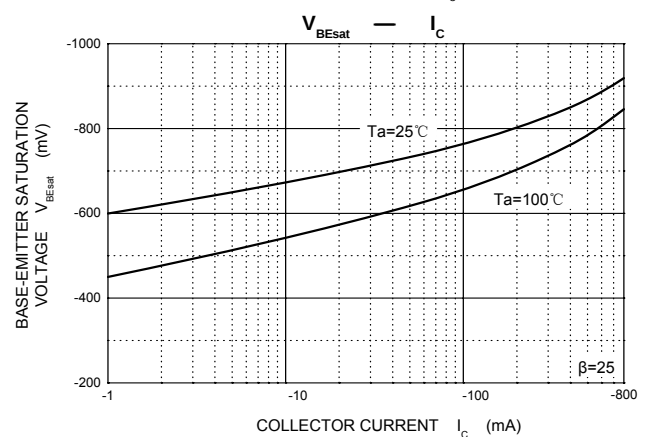
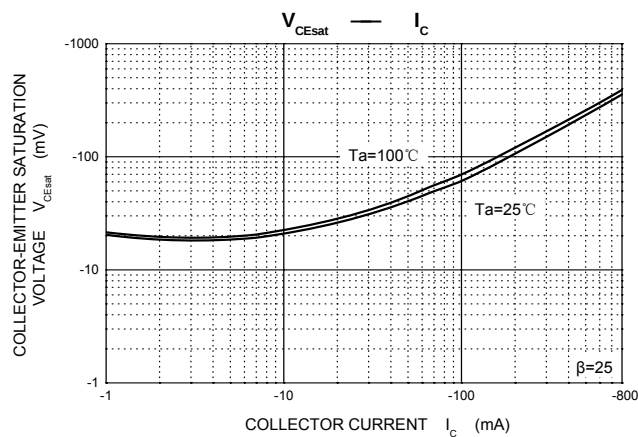
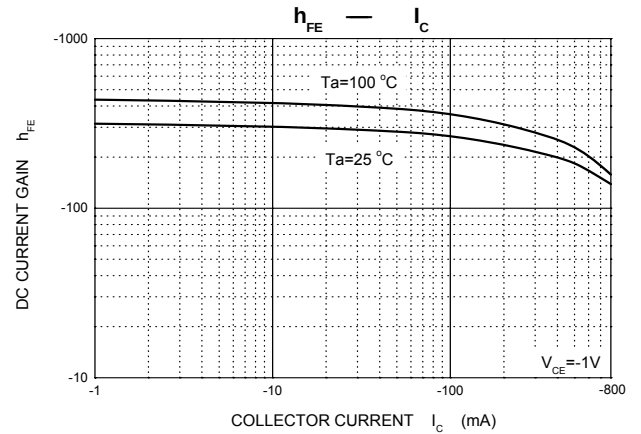
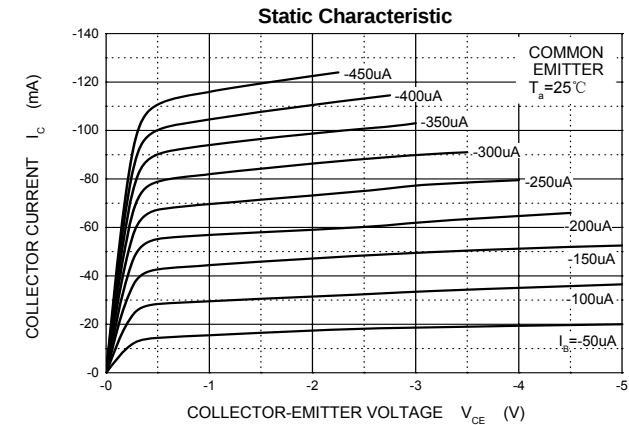
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1mA, I_E = 0$	-35			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1mA, I_C = 0$	-5			V
Collector cut-off current	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	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -100mA$	100		320	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -800mA$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -20mA$			-0.4	V
Base-emitter voltage	V_{BE}	$V_{CE} = -1V, I_C = -10mA$	-0.5		-0.8	V
Transition frequency	f_T	$V_{CE} = -5V, I_C = -10mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$		13		pF

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	100 - 200	160 - 320
MARKING	IO	IY



Rating And Characteristic Curves





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