MMBTSA1182

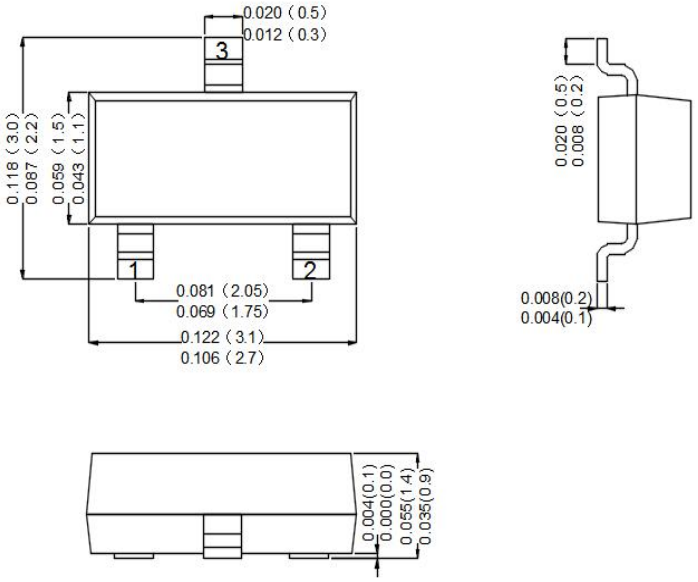
PNP Silicon Epitaxial Planar Transistor

Features

SOT-23

- For low frequency power amplifier applications
- The transistor is subdivided into two groups,

O and Y according to its DC current gain.



Dimensions in inches and (millimeters)

Mechanical Data

- Case:Molded Plastic,SOT-23
- Epoxy:UL 94V-0 rate flame retardant
- Terminals:Plated Leads Solderable perMIL-STD-750,Method-2026.
- Marking: marked on body
- Mounting Position : Any.
- Equivalent Circuit:

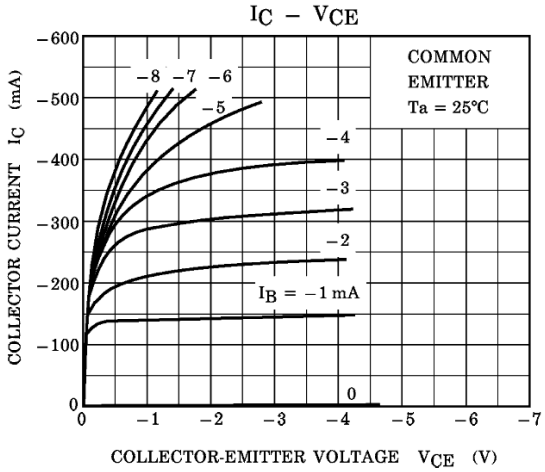
Maximum Ratings Maximum Ratings (Rating at 25℃ ambient temperature unless otherwise specified.)

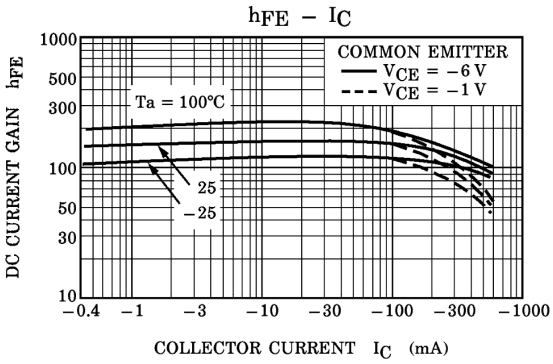
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	35	V
Collector Emitter Voltage	$-V_{CEO}$	30	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	- 55 to + 1 0	°C

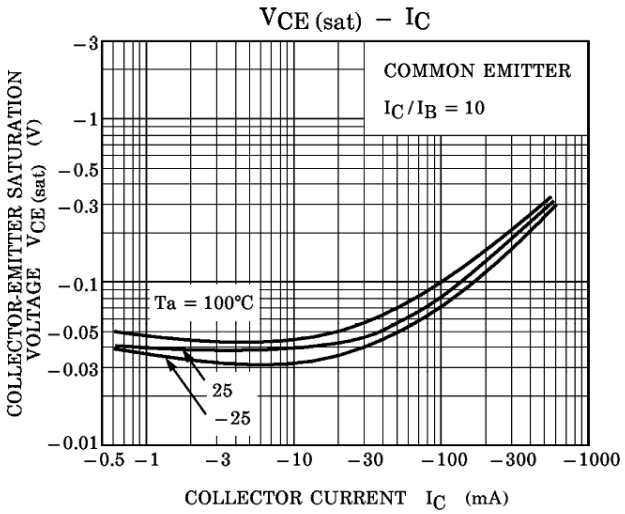
Electrical Characteristics (Rating at 25℃ ambient temperature unless otherwise specified.)

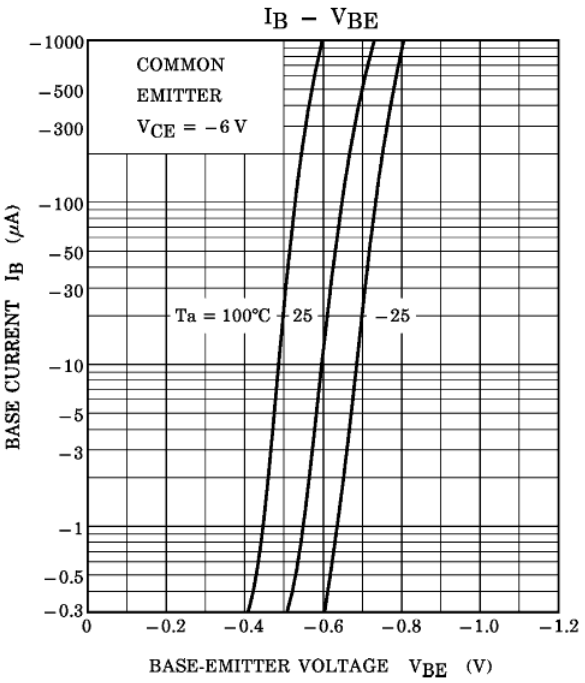
Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain						
at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA	O	h_{FE}	70	-	140	-
	Y	h_{FE}	120	-	240	-
at $-V_{CE}$ = 6 V, $-I_C$ = 400 mA		h_{FE}	25	-	-	-
Collector Cutoff Current at $-V_{CB}$ = 35 V		$-I_{CBO}$	-	-	0.1	µA
Emitter Cutoff Current at $-V_{EB}$ = 5 V		$-I_{EBO}$	-	-	0.1	µA
Collector Emitter Saturation Voltage at $-I_C$ = 100 mA, $-I_B$ = 10 mA		$-V_{CE(sat)}$	-	-	0.25	V
Base Emitter On Voltage at $-V_{CE}$ = 1 V, $-I_C$ = 100 mA		$-V_{BE(on)}$	-	-	1	V
Transition Frequency at $-V_{CE}$ = 6 V, $-I_C$ = 20 mA		f_T	-	200	-	MHz
Collector Output Capacitance at $-V_{CB}$ = 6 V, f = 1 MHz		C_{ob}	-	13	-	pF

Rating And Characteristic Curves









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