MMBTSA1365

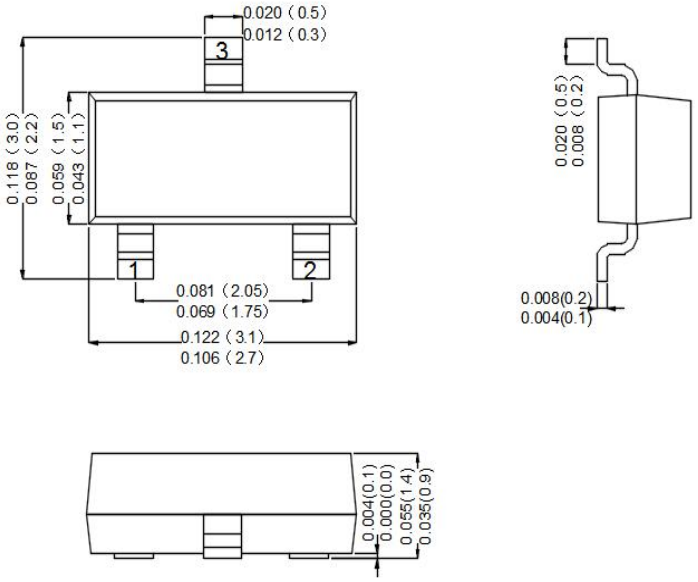
PNP Silicon Epitaxial Planar Transistor

Features

SOT-23

- For high current drive application
- The transistor is subdivided into three groups

E,F and G 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.)

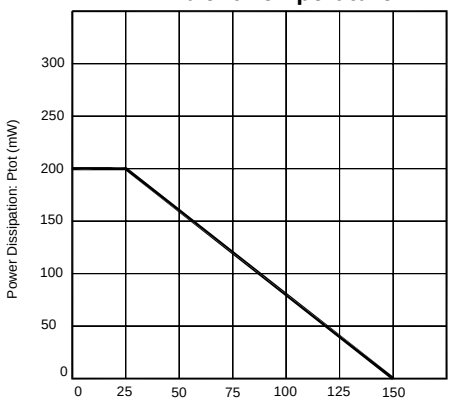
Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	25	V
Collector Emitter Voltage	$-V_{CEO}$	20	V
Emitter Base Voltage	$-V_{EBO}$	4	V
Collector Current	$-I_C$	700	mA
Peak Collector Current	$-I_{CM}$	1	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	- 55 to + 150	°C

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

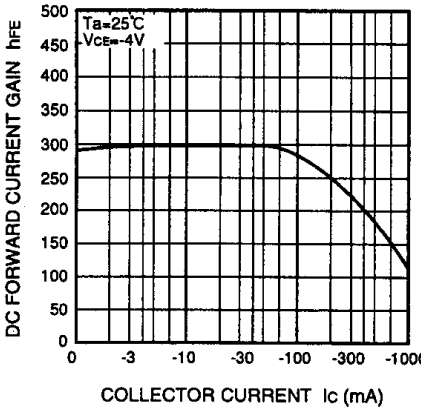
Parameter		Symbol	Min.	Typ.	Max.	Unit
DC Current Gain at $-V_{CE}$ = 4 V, $-I_C$ = 100 mA	E F G	h_{FE} h_{FE} h_{FE}	150 250 400	- - -	300 500 800	- - -
Collector Cutoff Current at $-V_{CB}$ = 25 V		$-I_{CBO}$	-	-	1	µA
Emitter Cutoff Current at $-V_{EB}$ = 2 V		$-I_{EBO}$	-	-	1	µA
Collector Base Breakdown Voltage at $-I_C$ = 10 µA		$-V_{(BR)CBO}$	25	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 100 µA		$-V_{(BR)CEO}$	20	-	-	V
Emitter Base Breakdown Voltage at $-I_E$ = 10 µA		$-V_{(BR)EBO}$	4	-	-	V
Collector Saturation Voltage at $-I_C$ = 500 mA, $-I_B$ = 25 mA		$-V_{CE(sat)}$	-	-	0.5	V
Transition Frequency at $-V_{CE}$ = 6 V, I_E = 10 mA		f_T	-	180	-	MHz

Rating And Characteristic Curves

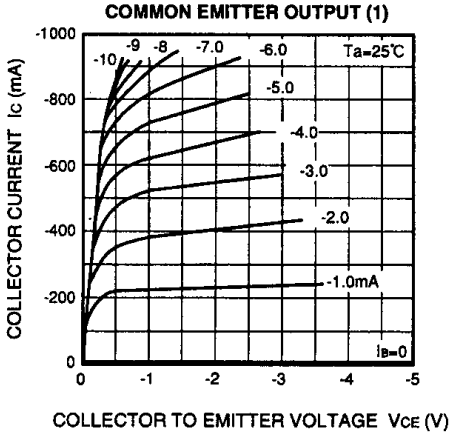
Power Dissipation vs Ambient Temperature



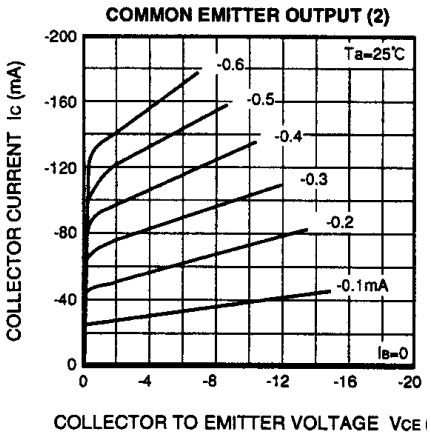
DC FORWARD CURRENT GAIN VS. COLLECTOR CURRENT



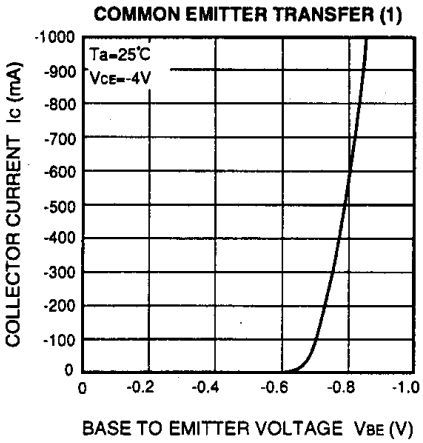
COMMON EMITTER OUTPUT (1)



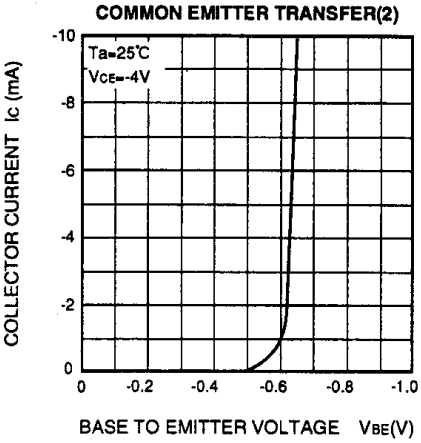
COMMON EMITTER OUTPUT (2)



COMMON EMITTER TRANSFER (1)



COMMON EMITTER TRANSFER(2)



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without from XINNUO.
- XINNUO reserves the right to make changes to this document and its products and specifications.
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown her are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.