



BM05P06A

主要参数 MAIN CHARACTERISTICS

I_C	-5A
V_{CEO}	-60V
P_C (a) (SOT-89)	1.5W
P_C (b) (SOT-223)	3W

用途

- 静音开关
- 电池充电器
- 线性开关电源
- 电机驱动器

APPLICATIONS

- Switching and muting
- Battery charger
- Supply line switching circuits
- motor drivers

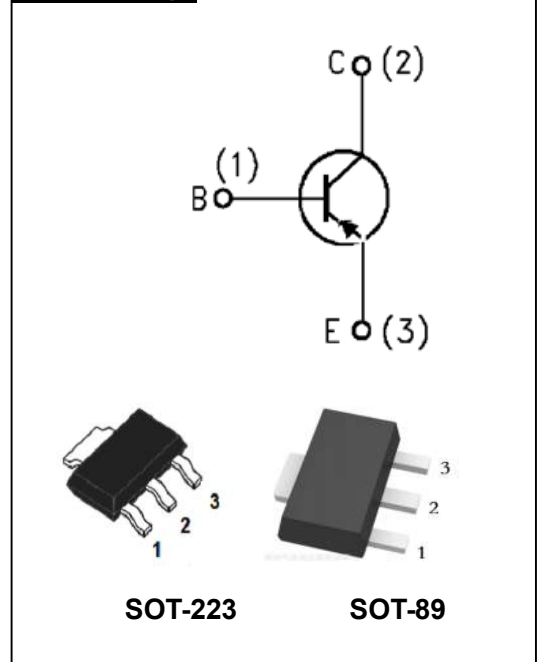
产品特性

- 硅外延
- 饱和压降低, 电流大
- 与 BM05N06A 互补
- 环保 (RoHS) 产品

FEATURES

- Epitaxial silicon
- Low $V_{CE(sat)}$, high current
- Complementary to BM05N06A
- RoHS product

封装 Package



订货信息 ORDER MESSAGE

订货型号 Order codes				印 记 Marking	封 装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube	有卤-编带 Halogen-Reel	无卤-编带 Halogen Free-Reel		
NA	N/A	N/A	BM05P06A-NB-AR	05P06	SOT-89
NA	N/A	N/A	BM05P06A-NC-AR	05P06	SOT-223



绝对最大额定值 ABSOLUTE RATINGS (Tc=25°C)

项 目 Parameter	符 号 Symbol	数 值 Value	单 位 Unit	
集电极—基极直流电压	Collector- Base Voltage (I _E =0)	V _{CBO}	-100	V
集电极—发射极直流电压	Collector- Emitter Voltage (I _B =0)	V _{CEO}	-60	V
发射极—基极直流电压	Emitter-Base Voltage (I _C =0)	V _{EBO}	-7	V
最大集电极直流电流	Collector Current (DC)	I _C	-5	A
最大集电极耗散功率 SOT-89	Total Dissipation	P _{C(a)}	1.5	W
最大集电极耗散功率 SOT-223	Total Dissipation	P _{C(b)}	3	W
最高结温	Junction Temperature	T _j	150	°C
贮存温度	Storage Temperature	T _{stg}	-55~+150	°C

电特性 ELECTRICAL CHARACTERISTIC

项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	最大值 Value(max)	单 位 Unit
BV _{CBO}	I _C =-100 μA,	-100		V
BV _{CES}	I _C =-100 μA,	-100		V
BV _{CEO}	I _C =-10mA	-60		V
BV _{EBO}	I _E =-100μA, I _C =0	-7		V
I _{CBO}	V _{CB} =-80V, I _E =0		-20	nA
I _{CES}	V _{CB} =-80V, I _E =0		-20	nA
I _{EBO}	V _{EB} =-6V, I _C =0		-10	nA
h _{FE} (1)	V _{CE} =-1V, I _C =-10mA	100		
h _{FE} (2)	V _{CE} =-1V, I _C =-2A	100	300	
h _{FE} (3)	V _{CE} =-1V, I _C =-5A	45		
h _{FE} (4)	V _{CE} =-1V, I _C =-10A	10		
V _{cesat1}	I _C =-100mA, I _B =-10mA		-20	mV
V _{cesat2}	I _C =-1A, I _B =-100mA		-65	mV
V _{cesat3}	I _C =-2A, I _B =-200mA		-110	mV
V _{cesat4}	I _C =-5A, I _B =-500mA		-240	mV
V _{besat}	I _C =-5A, I _B =-500 mA		-1.05	V
V _{beon}	V _{CE} =-1V, I _C =-5A		-0.95	V

热特性 THERMAL CHARACTERISTIC

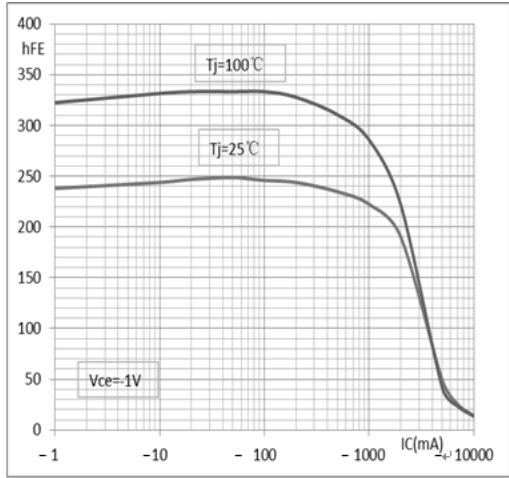
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到环境的热阻SOT-89 (a) Thermal Resistance, Junction-to-Ambient	R _{th(j-a)}	-	83	°C/W
结到环境的热阻SOT-223 (b) Thermal Resistance, Junction-to-Ambient	R _{th(j-a)}	-	42	°C/W

(a) For a device surface mounted on 25mm x 25mm x 1.6mm FR4 PCB with high coverage of single sided 35um copper, in still air conditions. b) For a device surface mounted on 52mm x 52mm x 1.6mm FR4 PCB with high coverage of single sided 70um copper, in still air conditions.

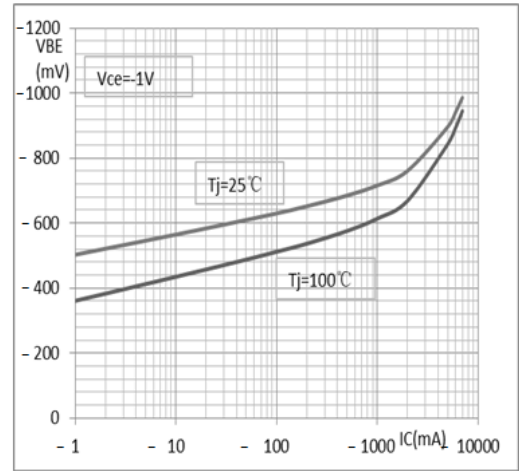


特征曲线 ELECTRICAL CHARACTERISTICS (curves)

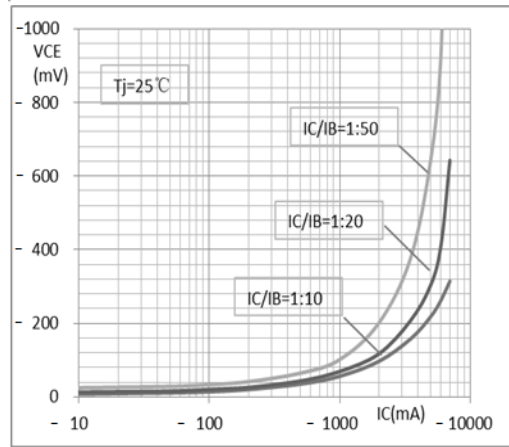
$hFE - I_C$



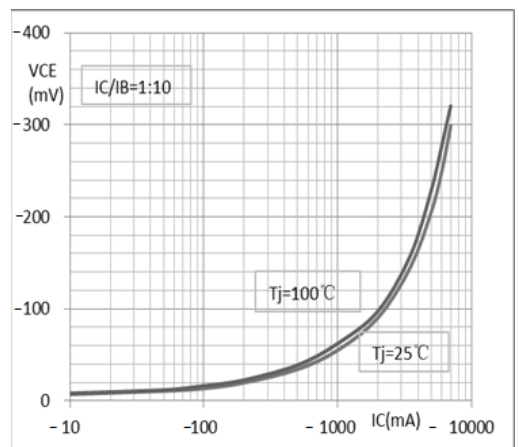
$V_{BEon} - I_C$



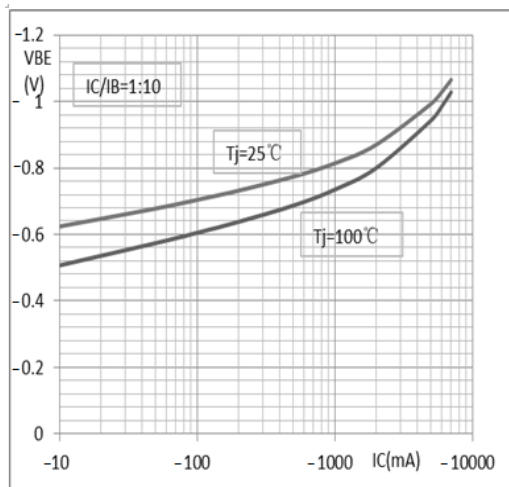
$V_{CE(sat)} - I_C$



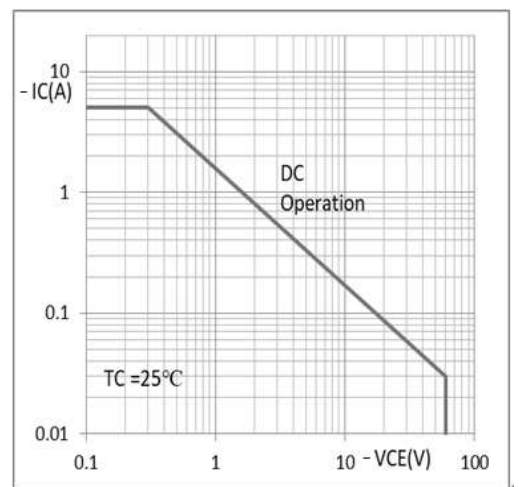
$V_{CE(sat)} - I_C$



$V_{BE(sat)} - I_C$



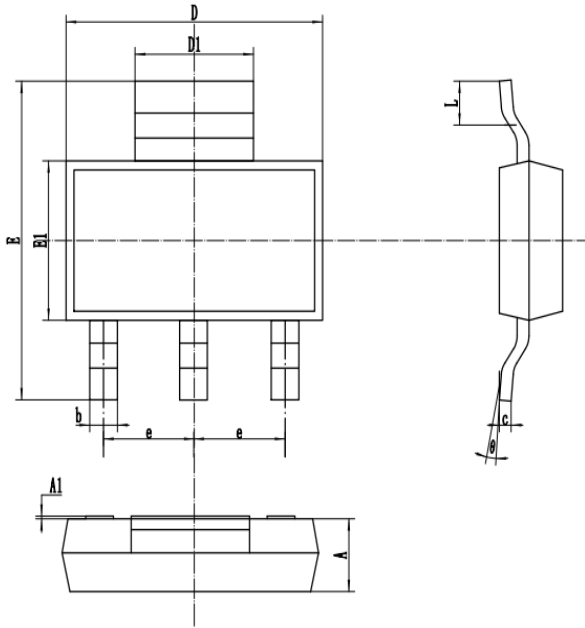
SOA





外形尺寸 PACKAGE MECHANICAL DATA
SOT-223

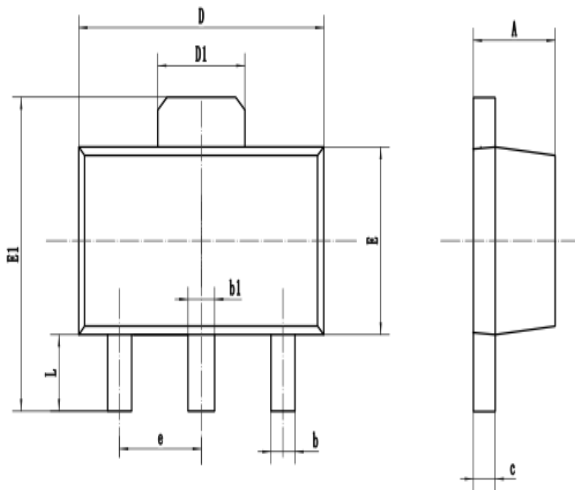
单位 Unit : mm



SYMBOL	mm	
	MIN	MAX
A	1.50	1.80
A1	0.01	0.12
b	0.60	0.85
c	0.15	0.40
D	6.25	6.75
D1	2.80	3.20
E	6.75	7.25
E1	3.30	3.70
e	2.30 BASIC	
L	0.80	1.20
θ	-	10°

SOT-89

单位 Unit : mm



SYMBOL	MM	
	MIN	MAX
A	1.30	1.70
b	0.30	0.55
b1	0.35	0.65
c	0.30	0.50
D	4.30	4.70
D1	1.55 REF	
E	2.30	2.60
E1	3.90	4.30
e	1.50 TYP	
L	0.80	1.20



注意事项

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4. 本说明书如有版本变更不另外告知。

NOTE

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3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this. specification sheet and is subject to change without prior notice.

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