

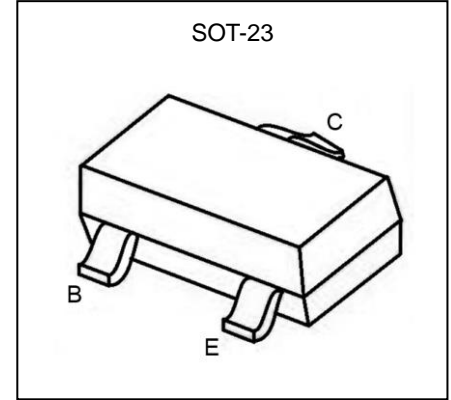


MMBTA06 Transistor(NPN)

Feature

- For Switching and Amplifier Applications
- Complementary PNP Type Available(MMBTA56)

Marking: 1GM



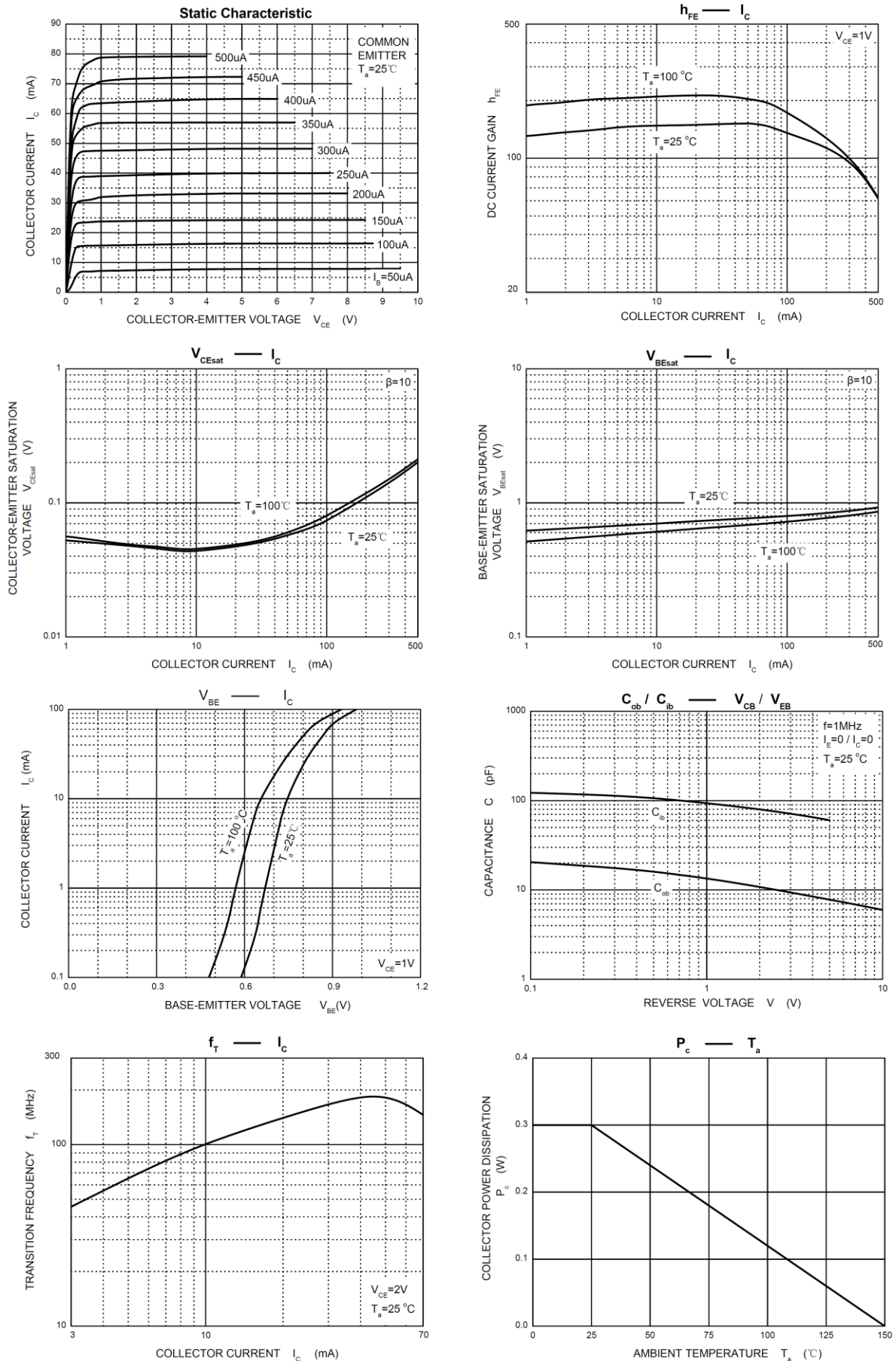
MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

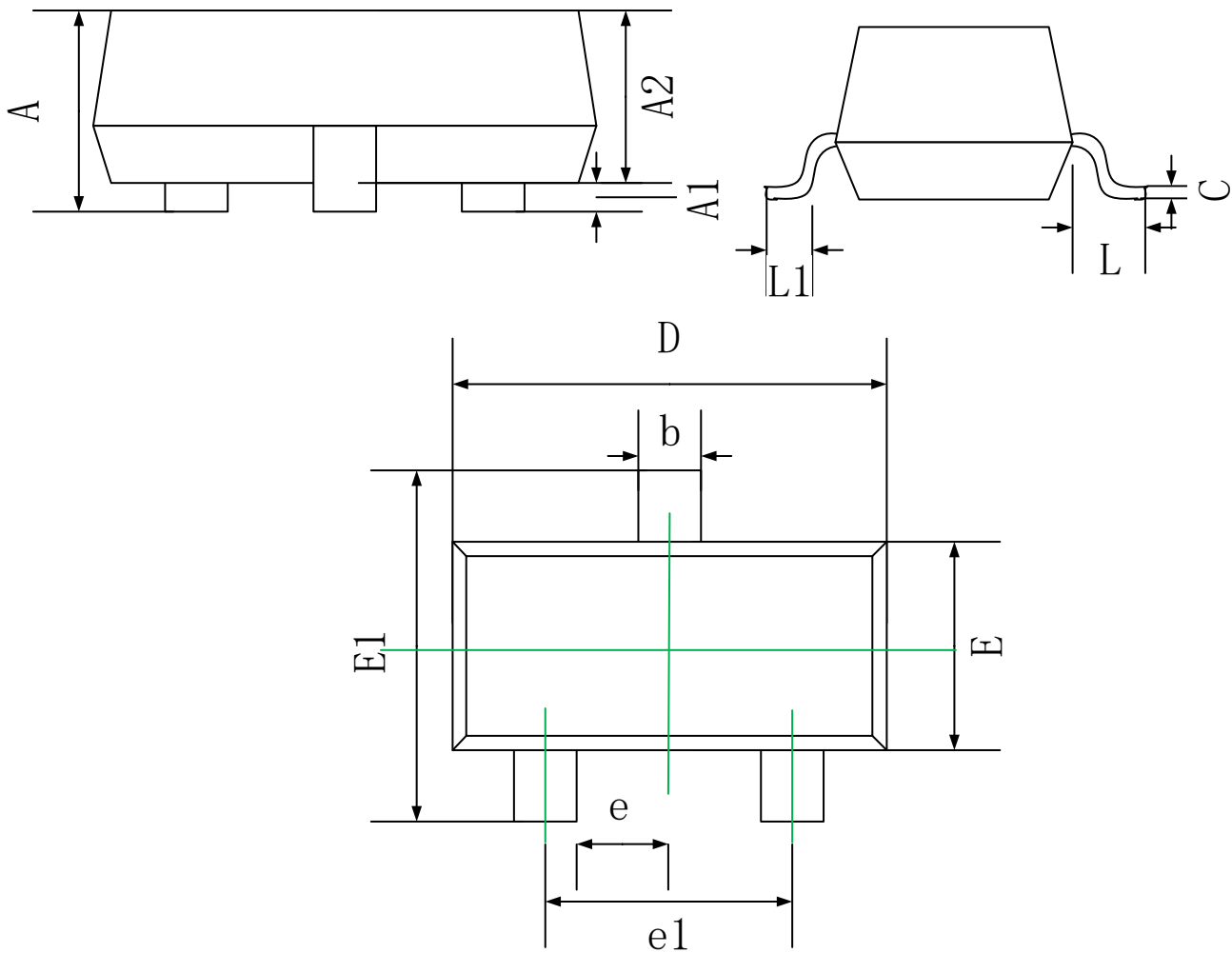
Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	80	V
Collector-Emitter Voltage	V _{CE0}	80	V
Emitter-Base Voltage	V _{EB0}	4	V
Collector Current -Continuous	I _c	0.5	A
Power Dissipation	P _d	0.3	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55~ +150	°C

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _c =100μA, I _E =0	80		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _c =-1mA, I _B =0	80		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =100μA, I _c =0	4		V
Collector cut-off current	I _{CBO}	V _{CB} =80V, I _E =0		100	nA
Collector cut-off current	I _{CEO}	V _{CE} =60V, I _B =0		100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =3V, I _c =0		100	nA
DC current gain	h _{FE}	V _{CE} =1V, I _c =10mA	100	400	
		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, I _B = 10mA		1.2	V
Transition frequency	f _T	V _{CE} = 2V, I _c =10mA, f =100MHz	100		MHZ

Typical Characteristics



SOT-23 Package Information


Symbol	Dimensions In Millimeters	
	Min.	Max.
A	0.90	1.15
A1	0.00	0.10
A2	0.90	1.05
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
E1	2.25	2.55
e	0.95 REF.	
e1	1.80	2.00
L	0.55 REF.	
L1	0.30	0.50