



MMBTA06

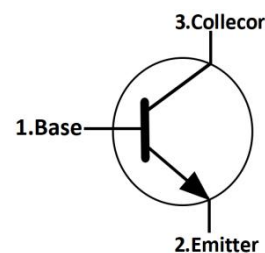
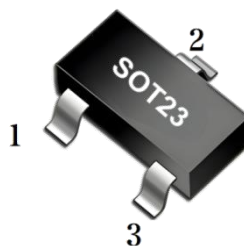
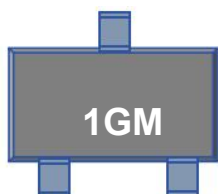
NPN SILICON TRANSISTOR

FEATURES

- * For Switching and Amplifier Applications
- * Complementary Type PNP Transistor MMBTA56

MARKING

Type Code: Marking: 1GM



ABSOLUTE MAXIMUM RATINGS (Tc=25°C, unless otherwise specified)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-base voltage	80	V
V _{CEO}	Collector-emitter voltage	80	V
V _{EBO}	Emitter-base voltage	4	V
I _C	Collector current	0.5	A
P _C	Collector Power Dissipation	300	mW
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C
ROJA	Thermal Resistance From Junction To Ambient	416	°C/W

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

ELECTRICAL CHARACTERISTICS (Tc=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-base breakdown voltage(Note 1)	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 cutoff current	I _{CBO}	V _{CB} =80V, I _E =0		0.1	μA
Collector cut-off current	I _{CEO}	V _{CE} =60V, I _B =0		1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =3V, I _C =0		0.1	μA
DC Current Gain	h _{FE1}	V _{CE} =1V, I _C =10mA	100	400	
	h _{FE2}	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 (Note 2)	f _T	V _{CE} =2V, I _C = 10mA, f=100MHz	100		MHz

Note: 1.Pulse test: PW<300μs, Duty Cycle<2%

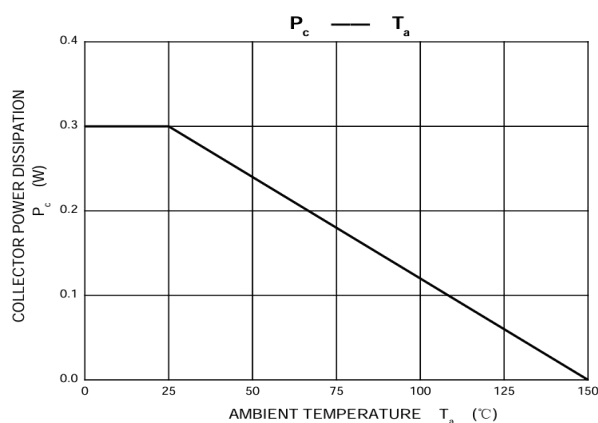
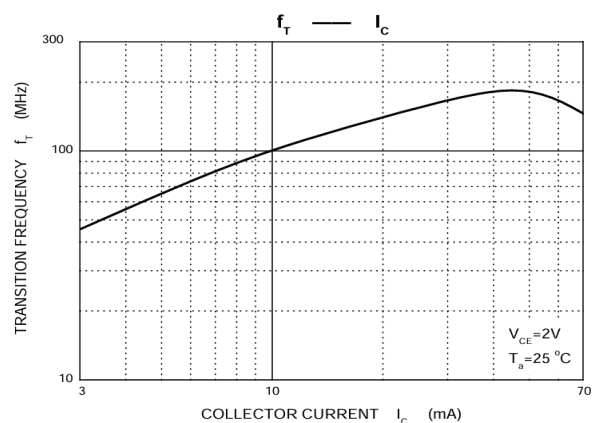
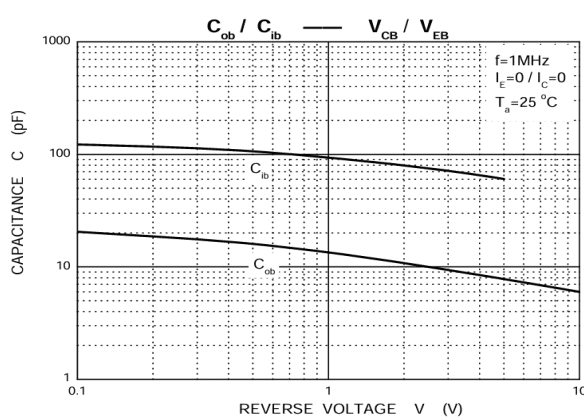
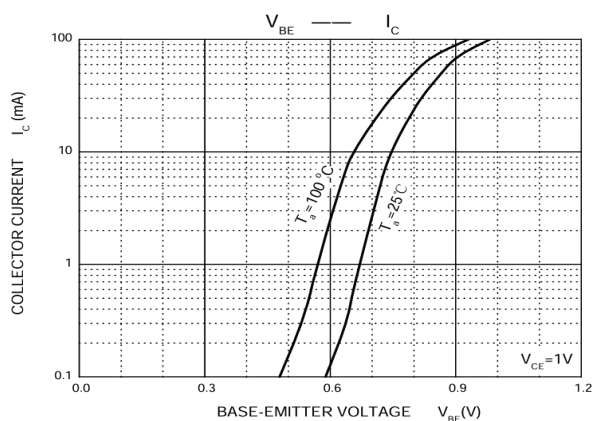
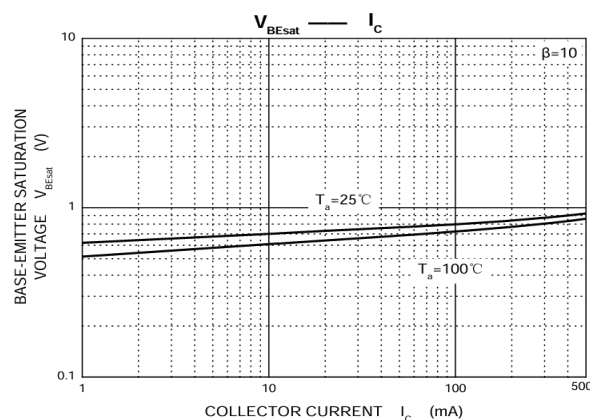
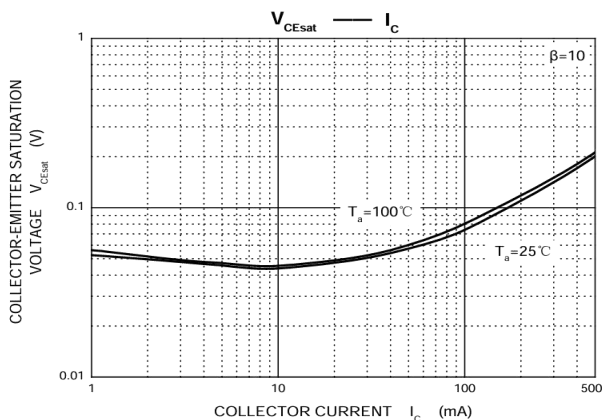
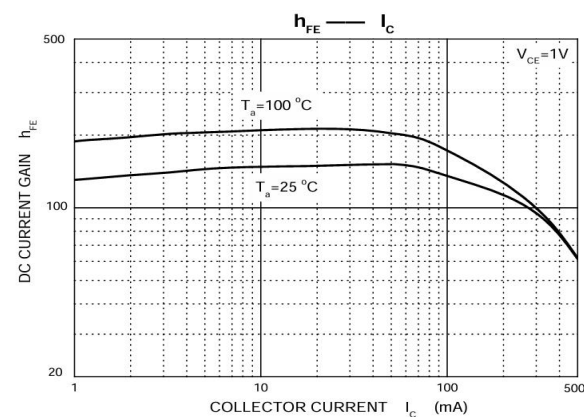
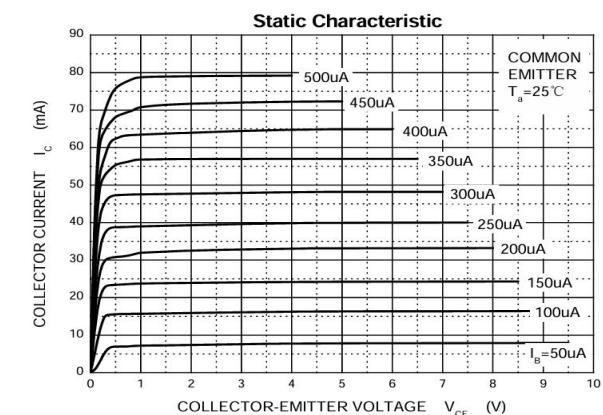
2.f_T is defined as the frequency at which I_{hfe1} extrapolates to unity.



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TYPICAL CHARACTERISTICS

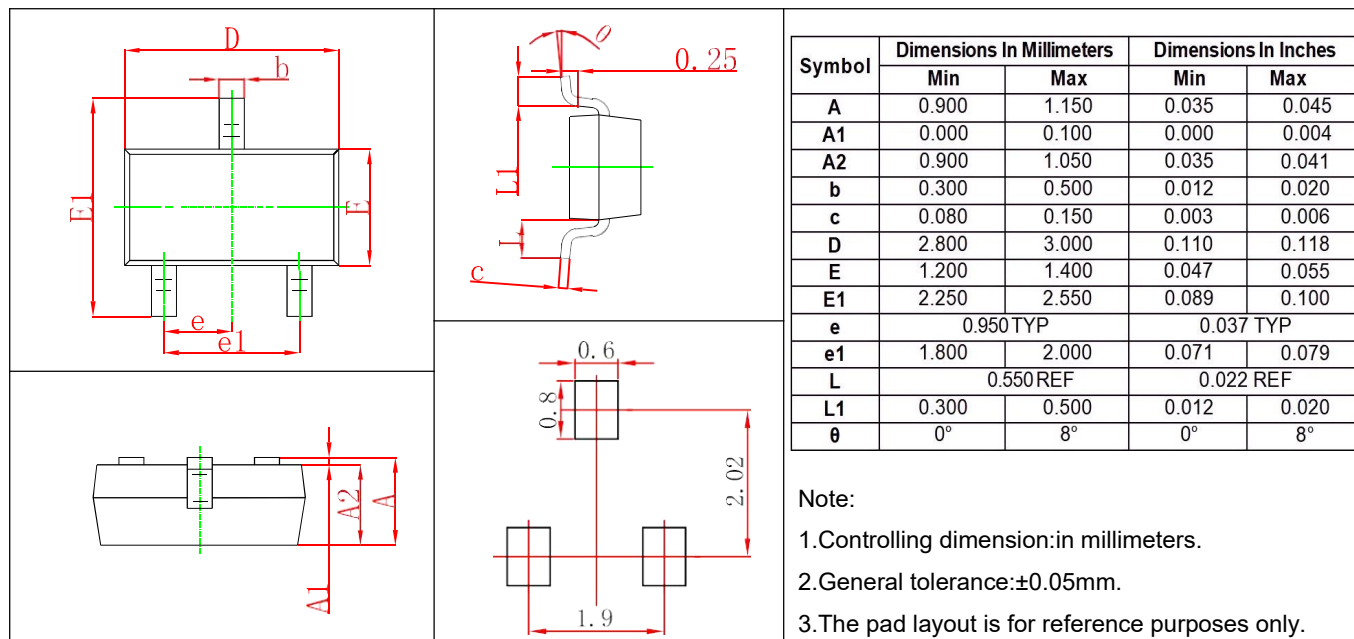




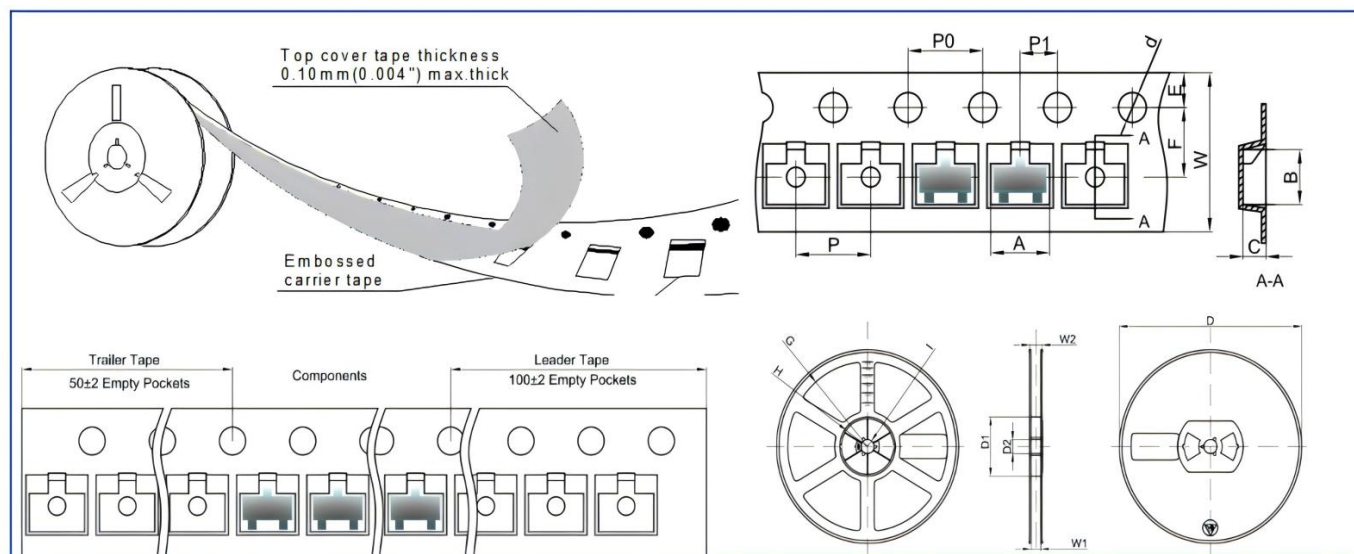
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NPN SILICON TRANSISTOR

SOT23 PACKAGE OUTLINE DIMENSIONS



REEL PACKING



Dimensions are in millimeter

PKG TYPE	A	B	C	d	E	F	Po	P	P1	W
SOT-23	3.15	2.77	1.22	Φ1.50	1.75	3.50	4.00	4.00	2.00	8.00
Reel Option	D	D1	D2	G	H	I	W1	W2	Q.TY PER REEL	
7" Dia	Φ178.0	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30	3000PCS	
13"Dia	φ330.0	/	13.00	/	/	R6.50	9.50	12.30	10000PCS	