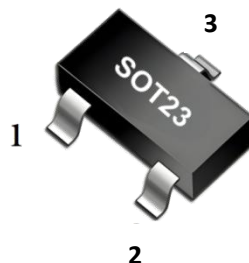


MMBT3906

PNP SILICON TRANSISTOR

FEATURES

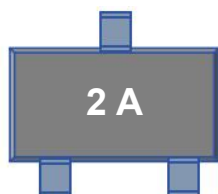
- * As complementary type, the NPN transistor MMBT3904 is Recommended
- * Epitaxial planar die construction



1. BASE
2. EMITTER
3. COLLECTOR

MARKING

Type Code: Marking: 2 A



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

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-base voltage	-40	V
V _{CE0}	Collector-emitter voltage	-40	V
V _{EB0}	Emitter-base voltage	-5	V
I _c	Collector current	-0.2	A
P _c	Collector Power Dissipation	0.2	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-60~150	°C
R _{θJA}	Thermal Resistance From Junction To Ambient	625	°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.

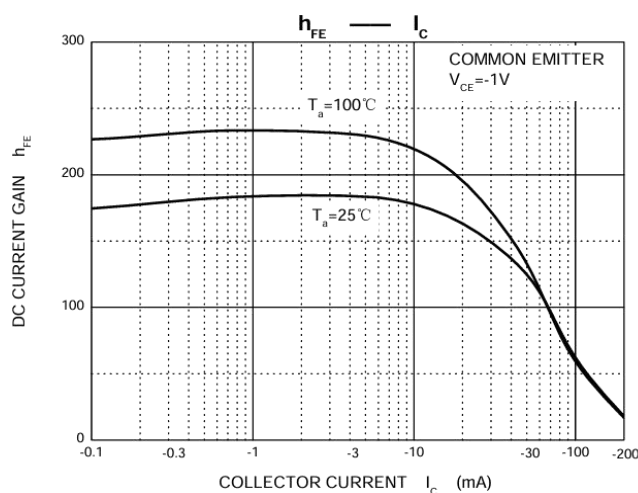
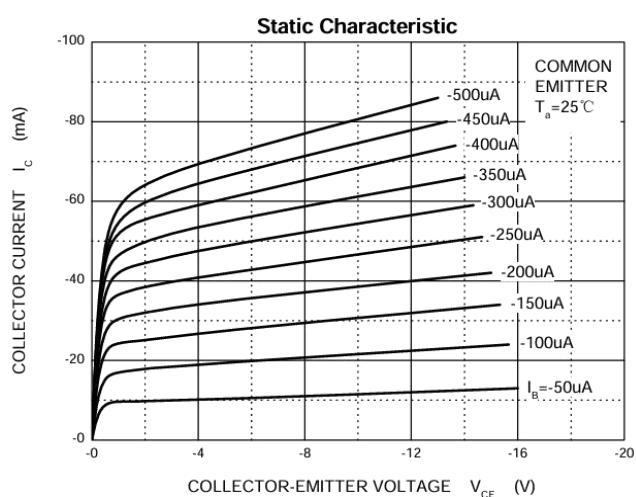
MMBT3906

PNP SILICON TRANSISTOR

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-40		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5		V
Collector cutoff current	I_{CBO}	$V_{CB}=-40V, I_E=0$		-0.1	μA
Collector cut-off current	I_{CEX}	$V_{CE}=-30V, V_{BE(off)}=-3V$		-0.05	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5V, I_C=0$		-0.1	μA
DC Current Gain (CLASSIFICATION OF h_{FE1})	h_{FE1}	$V_{CE}=-1V, I_C=-10mA$	100	300	
	h_{FE2}	$V_{CE}=-1V, I_C=-50mA$	60		
	h_{FE3}	$V_{CE}=-2V, I_C=-100mA$	30		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-50mA, I_B=-5mA$		-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=-50mA, I_B=-5mA$		-0.95	V
Transition frequency	f_T	$V_{CE}=-20V, I_C=-10mA, f=100MHz$	300		MHz
Delay Time	t_d	$V_{CC}=-3V, V_{BE}=-0.5V$ $I_C=-10mA, I_{B1}=I_{B2}=-1mA$		35	nS
Rise Time	t_r			35	nS
Storage Time	t_s	$V_{CC}=-3V, I_C=-10mA$ $I_{B1}=I_{B2}=-1mA$		225	nS
Fall Time	t_f			75	nS

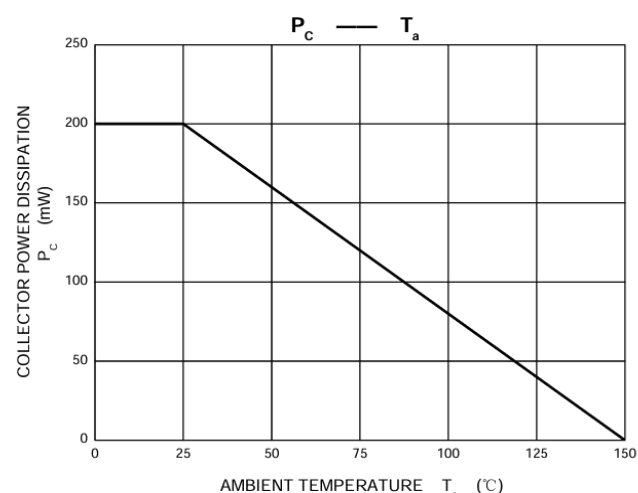
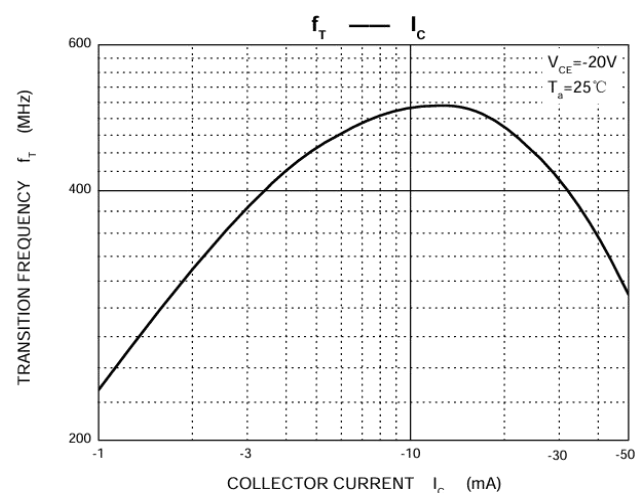
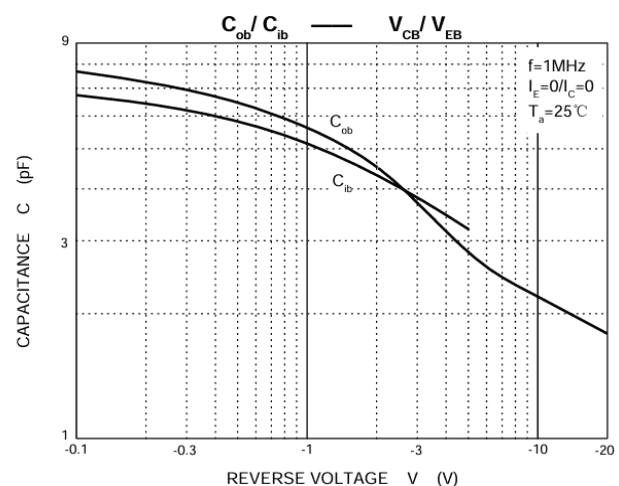
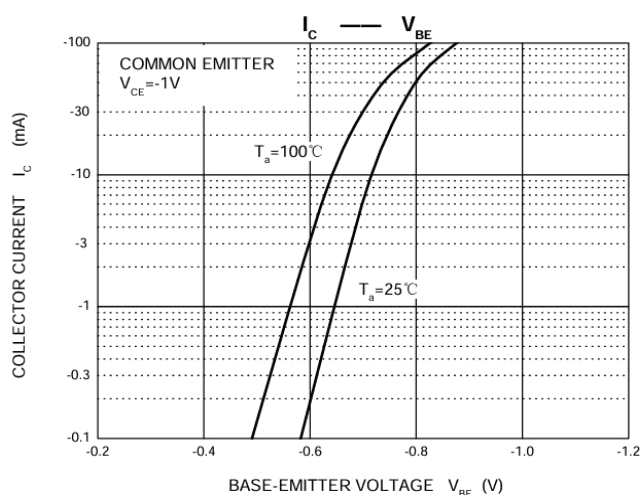
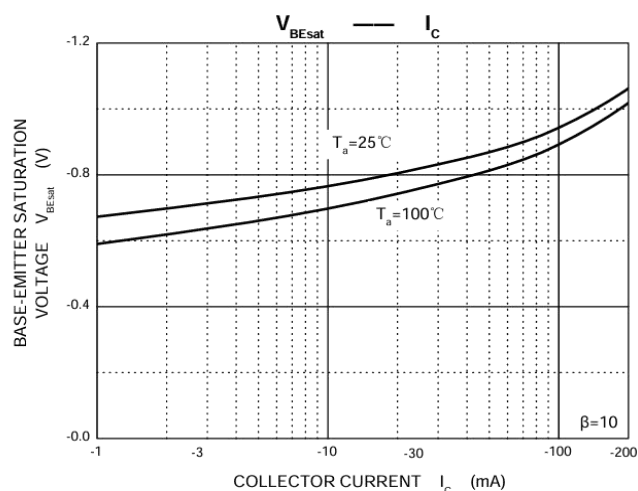
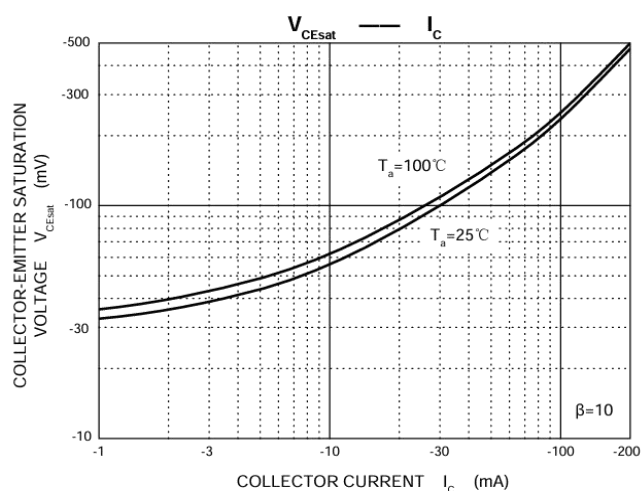
TYPICAL CHARACTERISTICS



MMBT3906

PNP SILICON TRANSISTOR

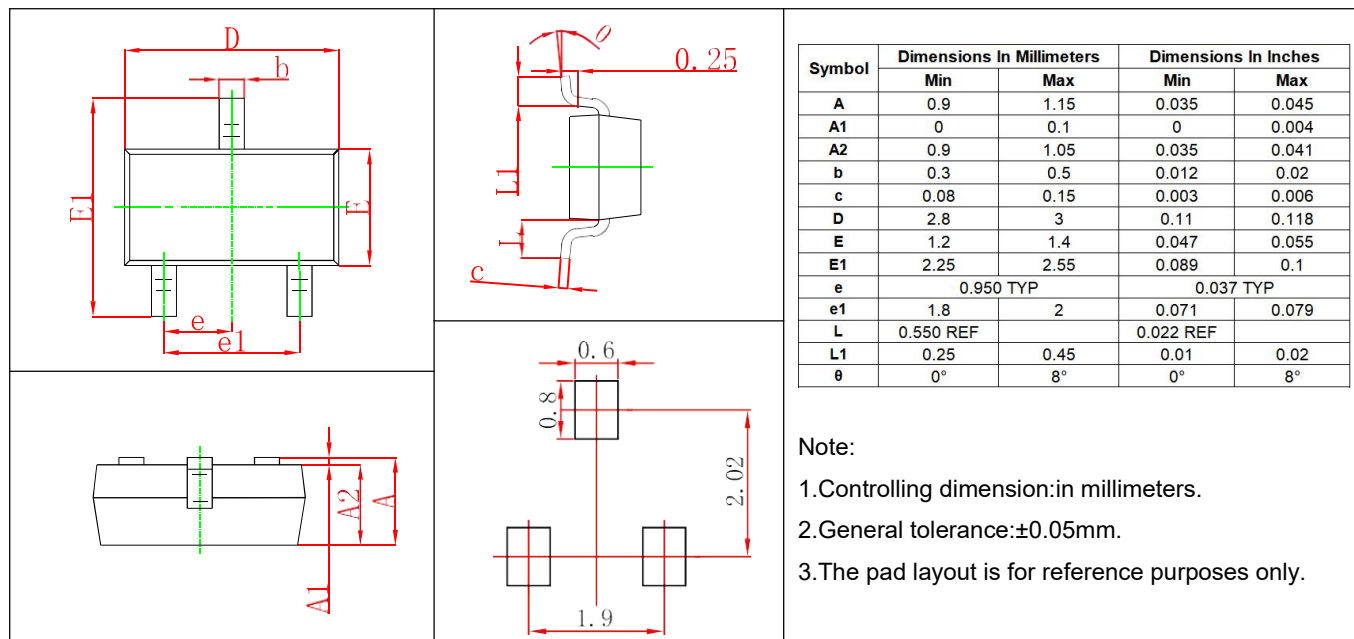
TYPICAL CHARACTERISTICS(Con.t)



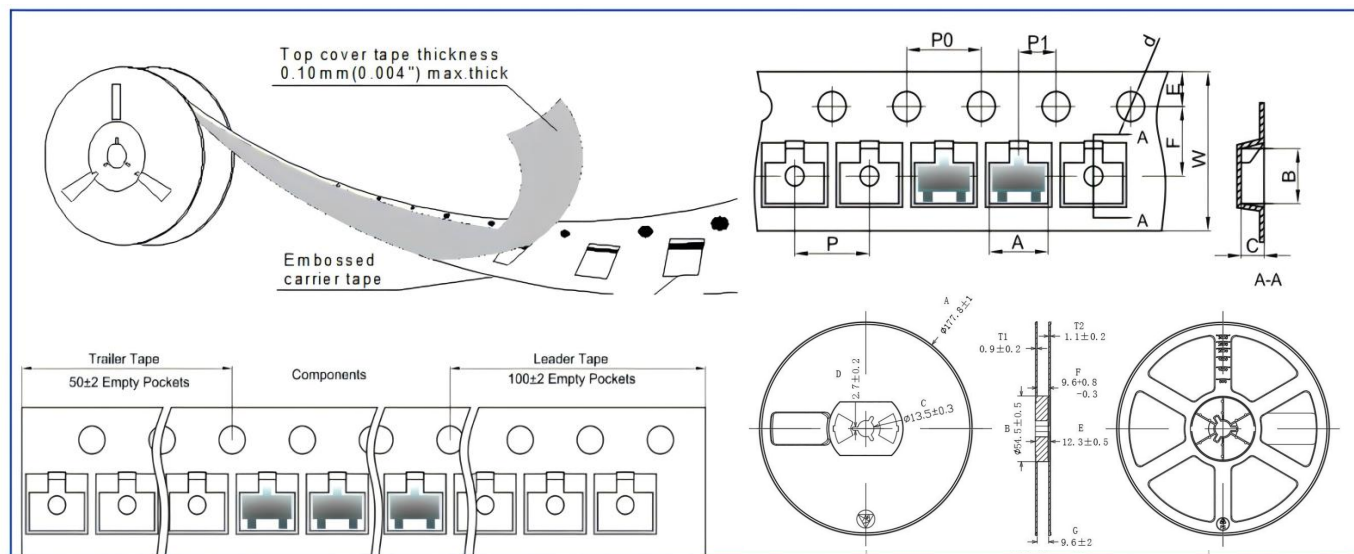
MMBT3906

PNP 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	3.17	2.77	1.22	Φ1.55	1.75	3.50	4.00	4.00	2.00	8.00
Reel Option	A	B	C	D	E	F	G	T1	T2	Q.TY PER REEL
7" Dia	Φ177.8	Φ54.5	Φ13.5	2.7	12.3	9.6	9.6	0.9	1.1	3000PCS