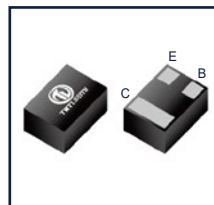
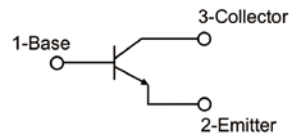


Features

- DFN1006-3L without plating
- Mounting position: Any
- Qualified max reflow temperature: 260 °C
- Device meets MSL 1 requirements



DFN1006-3L



Equivalent Circuit

Absolute Maximum Ratings (T_A=25 °C)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	60	V
V _{CE0}	Collector-Emitter Voltage	40	V
V _{EB0}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	200	mA
P _C	Collector Dissipation	100	mW
		590	
R _{θJA}	Thermal Resistance from Junction to Ambient	1250	°C/W
		212	
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature Range	-55 ~ +150	°C

Electrical Characteristics (T_A=25 °C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
V _{(BR)CBO}	Collector-base breakdown voltage	I _C =10μA, I _E =0	60			V
V _{(BR)CEO}	Collector-emitter breakdown voltage	I _C =1mA, I _B =0	40			V
V _{(BR)EBO}	Emitter-base breakdown voltage	I _E =10μA, I _C =0	6			V
I _{CBO}	Collector cut-off current	V _{CB} =60V, I _E =0			0.1	μA
I _{CEX}	Collector cut-off current	V _{CE} =30V, V _{BE(off)} =3V			50	nA
I _{EBO}	Emitter cut-off current	V _{EB} =5V, I _C =0			0.1	μA
h _{FE}	DC current gain	V _{CE} =1V, I _C =10mA	100		300	
V _{CE(sat)}	Collector-emitter saturation voltage	I _C =50mA, I _B =5mA			0.3	V
V _{BE(sat)}	Base-emitter saturation voltage	I _C =50mA, I _B =5mA			0.95	V
f _T	Transition frequency	V _{CE} =20V, I _C =10mA, f=100MHz	300			MHz
t _d	Delay time	V _{CC} =3V, V _{BE(off)} =0.5V , I _C =10mA, I _{B1} =1mA			35	ns
t _r	Rise time				35	ns
t _s	Storage time	V _{CC} =3V, I _C =10mA, I _{B1} =I _{B2} =1mA			200	ns
t _f	Fall time				50	ns

Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
PMBT3904M	DFN1006-3L	PMBT3904M ↓ 产品名称 product name	6P	10000



Typical Characteristics

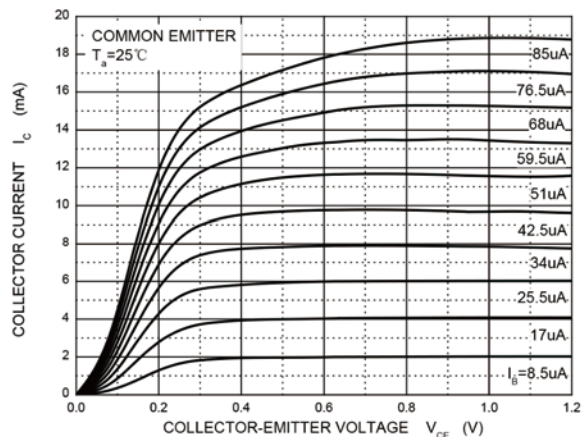
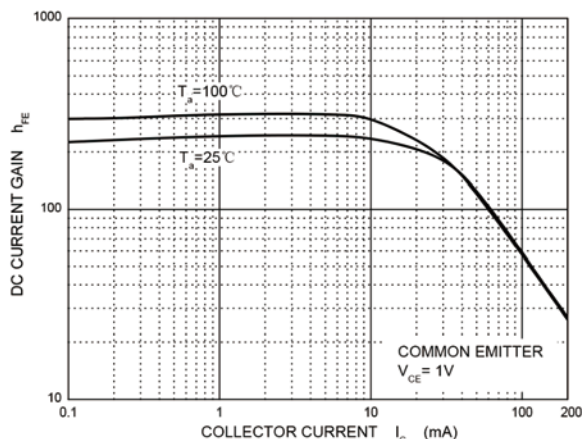
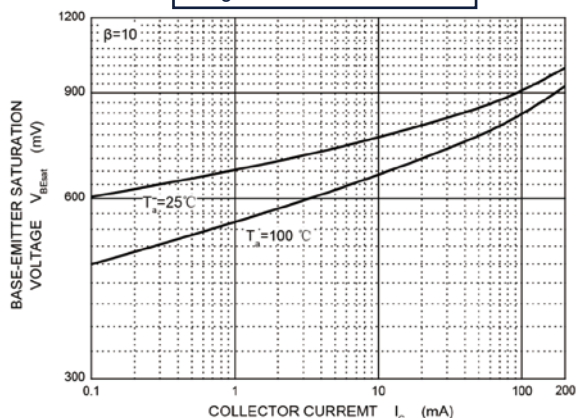
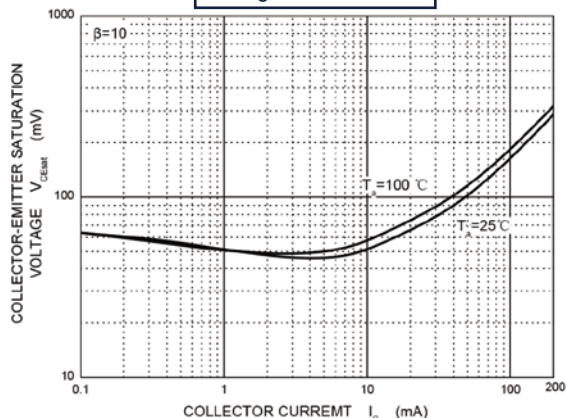
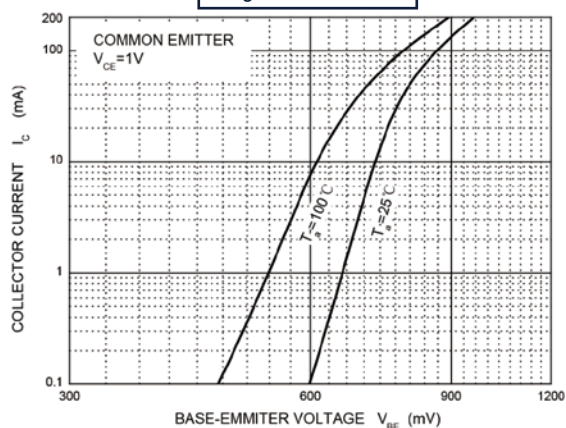
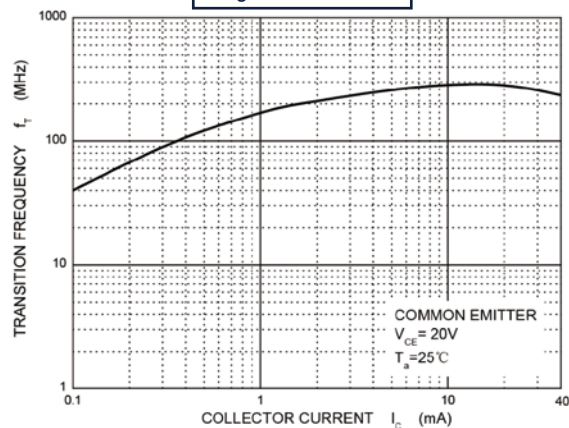
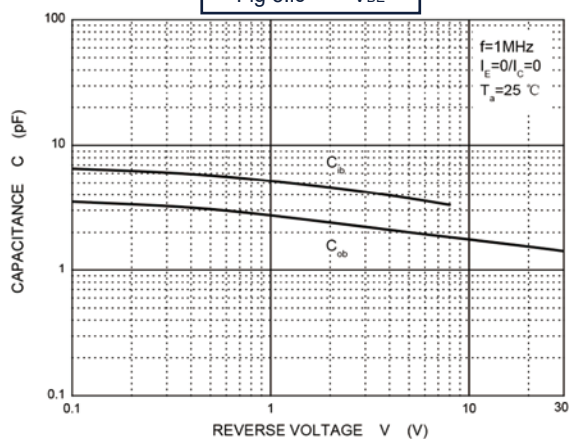
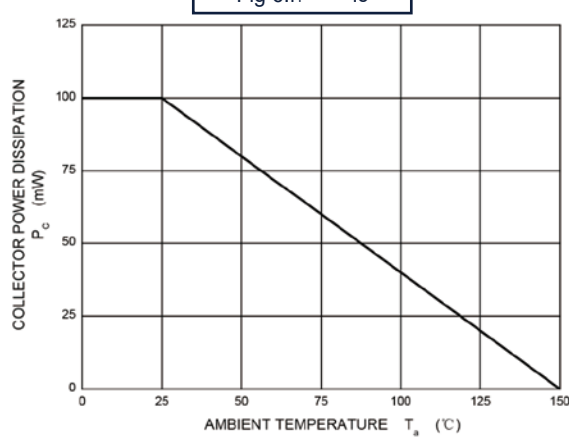
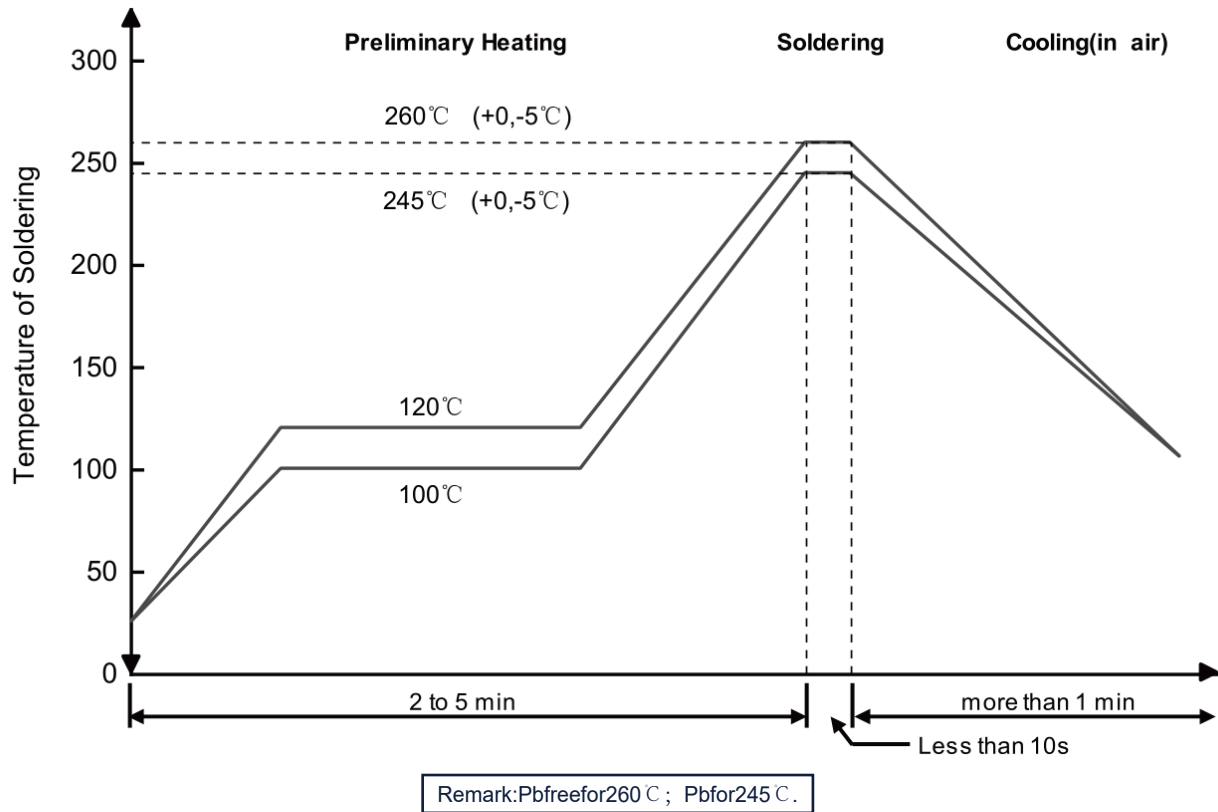


Fig 1. Static Characteristic

Fig 2. h_{FE} ----- I_c Fig 3. V_{BEsat} ----- I_c Fig 4. V_{CEsat} ----- I_c Fig 5. I_c ----- V_{BE} Fig 6. f_T ----- I_c Fig 7. C_{ob}/C_{ib} ----- V_{CB}/V_{EB} Fig 8. P_C ----- T_a

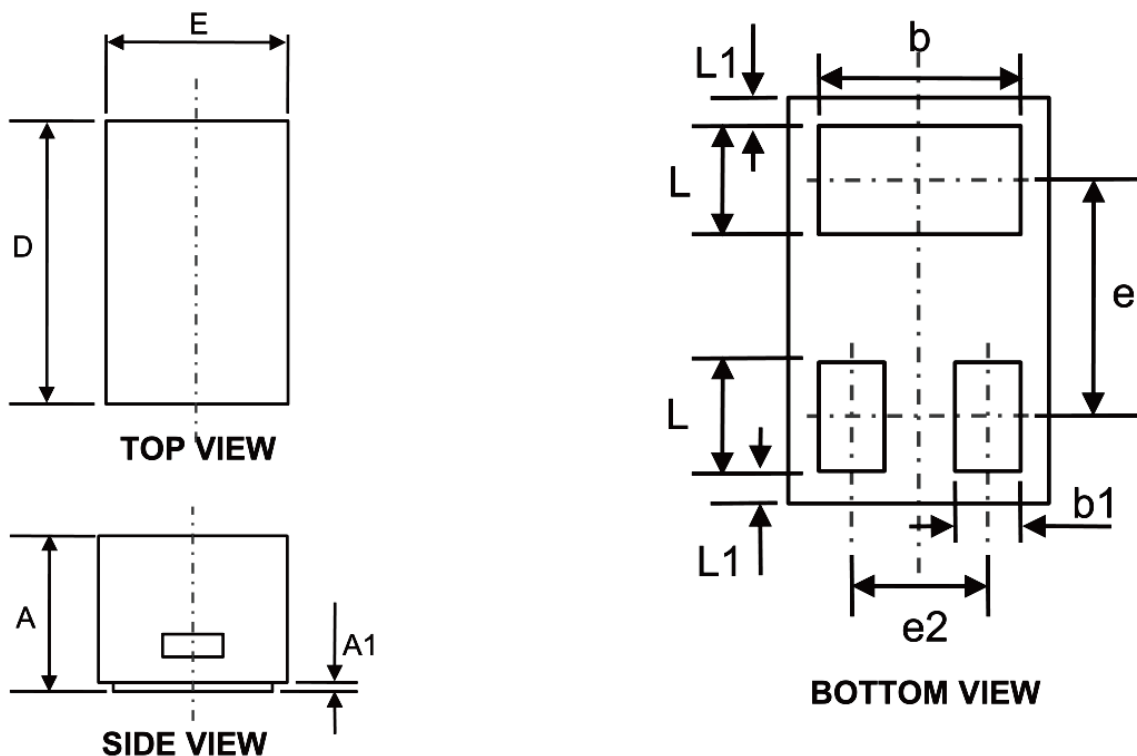


Solder Reflow Recommendation





DFN1006-3L Package Outline Dimensions



Symbol	Dimensions in Millimeters		Dimensions in Inches	
	Min	Max	Min	Max
A	0.400	0.500	0.016	0.020
A1	0.000	0.050	0.000	0.002
D	0.950	1.050	0.037	0.041
E	0.550	0.650	0.022	0.026
b	0.450	0.550	0.018	0.022
e	0.650 REF.		0.026 REF.	
e2	0.350 REF.		0.014 REF.	
L1	0.050 REF.		0.002 REF.	
L	0.200	0.300	0.008	0.012
b1	0.100	0.200	0.004	0.008