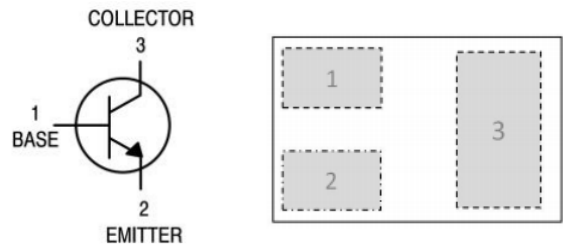


Features

- ◆ Power Dissipation of 100mW
- ◆ High Stability and High Reliability
- ◆ Epoxy UL: 94V-0
- ◆ RoHS Compliant
- ◆ Pb-Free


DFN1006-3L
特征

- ◆ 功耗 100mW
- ◆ 高稳定性和高可靠性
- ◆ 环氧树脂 UL 易燃等级:94V-0
- ◆ 符合 RoHS 标准
- ◆ 不含铅


MARKING CONTENT
丝印内容

| Device Type 器件型号 | Device Marking 器件印字 |
|---------------------|------------------------|
| MMBT3904LP-7B-CN | 1N |

Application 应用

- ◆ General Switching and Amplification 通用开关与放大应用
- ◆ Power management circuit 电源管理电路
- ◆ RF circuit 射频电路

Ordering information
订购信息

| Device Type 器件型号 | Package 封装 | Reel Size 卷盘尺寸 | SPQ 标准包装量 | MPQ 最小包装数量 | MOQ 最小订购数量 |
|---------------------|---------------|-------------------|--------------|---------------|-----------------|
| MMBT3904LP-7B-CN | DFN1006-3L | 7 Inch 英寸 | 10000/Reel | 150000/Box 盒 | 450000/Carton 箱 |

1、Package 封装
Table 1__Characteristic values
表 1__特征数值

| Parameter 参数 | Symbol 符号 | Note or test condition 注释或测试条件 | Values 数值 | | | Unit 单位 |
|--|------------------|--------------------------------------|--------------|------------|------------|------------|
| | | | Min. 最小 | Typ. 典型 | Max. 最大 | |
| Storage temperature 储存温度 | T _{stg} | / | -50 | / | +150 | °C |
| Thermal resistance, Junction-Ambient 结至环境热阻 | R _{θJA} | / | / | / | 1250 | °C/W |

2、Transistor
Table 2_ Maximum Ratings (T_A= 25°C unless otherwise noted)
表 2_ 极限参数(如无另外标识, 环境温度=25°C)

| Parameter 参数 | Symbol 符号 | Note or test condition 注释或测试条件 | Value 数值 | Unit 单位 |
|---|------------------|-----------------------------------|-------------|------------|
| Collector-Emitter Voltage 集电极-发射极电压 | V _{CEO} | / | 40 | V |
| Collector-Base Voltage 集电极-基极电压 | V _{CBO} | / | 60 | V |
| Emitter-Base Voltage 发射极-基极电压 | V _{EBO} | / | 6 | V |
| Continuous Collector Current 连续集电极电流 | I _C | / | 200 | mA |
| Collector Power Dissipation 集电极功耗 | P _C | / | 100 | mW |
| Operating junction temperature 工作结温度 | T _j | / | 125 | °C |

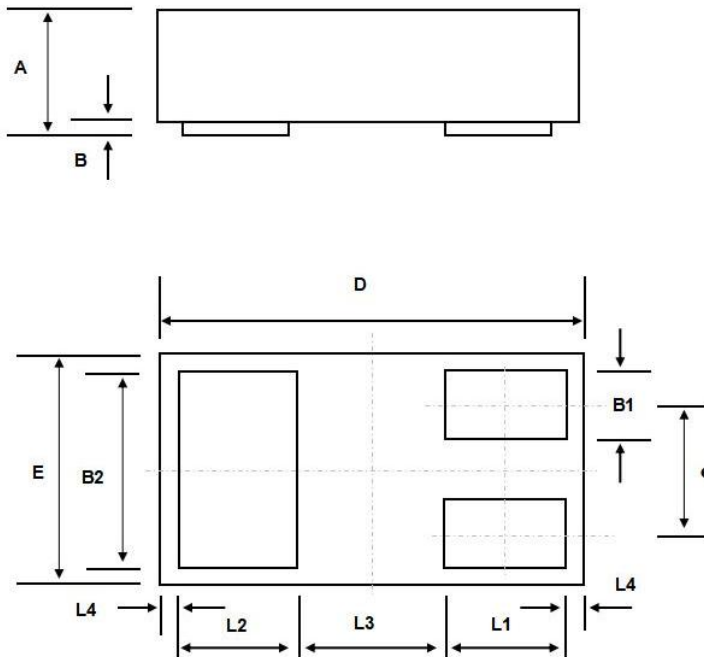
Table 3_ Electrical Characteristic Values(T_A=25°C,unless otherwise noted)
表 3_ 电气特性数值(如无另外标识, 环境温度=25°C)

| Parameter 参数 | Symbol 符号 | Note or test condition 注释或测试条件 | Limits 限值 | | | Unit 单位 |
|---|----------------------|--|-----------|------|------|------------|
| | | | Min. | Typ. | Max. | |
| Collector-emitter breakdown voltage 集电极-发射极击穿电压 | V _{(BR)CEO} | I _C =1mA I _B =0 | 40 | / | / | V |
| Collector-base breakdown voltage 集电极-基极击穿电压 | V _{(BR)CBO} | I _C =10uA I _E =0 | 60 | / | / | V |
| Emitter-base breakdown voltage 发射极-基极击穿电压 | V _{(BR)EBO} | I _E =10uA I _C =0 | 6 | / | / | V |
| Collector cut-off current 集电极-发射极 反向饱和电流 | I _{CEO} | V _{CB} =30V V _{EB(off)} =3V | / | / | 50 | nA |
| Emitter cut-off current 发射极-基极反向电流 | I _{EBO} | V _{EB} =5V I _C =0 | / | / | 100 | nA |

| Parameter 参数 | Symbol 符号 | Note or test condition 注释或测试条件 | Limits 限值 | | | Unit 单位 |
|--|--------------|--|-----------|------|------|------------|
| | | | Min. | Typ. | Max. | |
| DC current gain 直流电流增益 | hFE | VCE=1V IC=0.1mA | 40 | / | / | / |
| | | VCE=1V IC=1mA | 70 | / | / | |
| | | VCE=1V IC=10mA | 100 | / | / | |
| | | VCE=1V IC=50mA | 60 | / | / | |
| Collector-emitter saturation voltage 集电极-发射极饱和电压 | VCE(sat) | IC=10mA IB=1mA | / | / | 0.20 | V |
| | | IC=50mA IB=5mA | / | / | 0.30 | V |
| Base-emitter saturation voltage 基极-发射极间饱和电压 | VBE(sat) | IC=10mA IB=1mA | 0.65 | / | 0.85 | V |
| | | IC=50mA IB=5mA | / | / | 0.95 | V |
| Transition frequency 特征频率 | fT | VCE=20V IC=10mA f=100MHz | 300 | / | / | MHz |
| Delay time 延迟时间 | td | VCC=3V VBE(off)=-0.5V IC=10mA IB1=1mA | / | / | 35 | nS |
| Rise time 上升时间 | tr | | / | / | 35 | nS |
| Storage time 存贮时间 | ts | VCC=3V IC=10mA IB1=IB2=1mA | / | / | 200 | nS |
| Fall time 下降时间 | tf | | / | / | 50 | nS |
| Output capacitance 输出电容 | Cob | VCB=5V IE=0 f=1MHz | / | / | 4 | pF |
| Input capacitance 输入电容 | Cib | VEB=0.5V IC=0 f=1MHz | / | / | 8 | pF |

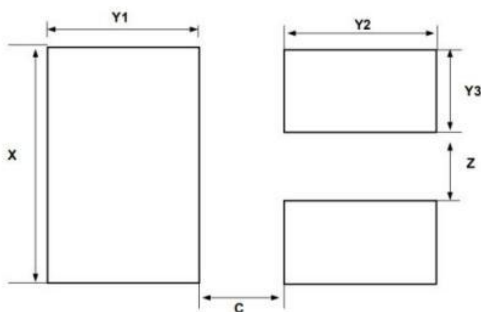
3、Package 封装信息

DFN1006-3L Package Information



| Symbol | Dimensions In Millimeter | |
|--------|--------------------------|------|
| | Min | Max |
| A | 0.33 | 0.50 |
| B | 0.00 | 0.05 |
| B1 | 0.10 | 0.20 |
| B2 | 0.45 | 0.55 |
| D | 0.90 | 1.05 |
| E | 0.50 | 0.65 |
| e | 0.35 | |
| L1 | 0.20 | 0.30 |
| L2 | 0.20 | 0.30 |
| L3 | 0.39 | |
| L4 | 0.05 | |

Suggested Pad Layout (mm)



| Symbol | Dimensions |
|--------|------------|
| C | 0.25 |
| X | 0.65 |
| Y1 | 0.50 |
| Y2 | 0.50 |
| Y3 | 0.25 |
| Z | 0.20 |

NOTICE

The information presented in this document is for reference only. Involving product optimization and productivity improvement, ChipNobo reserves the right to adjust product indicators and upgrade some technical parameters. ChipNobo is entitled to be exempted from liability for any delay or non-delivery of the information disclosure process that occurs.

本文件中提供的信息仅供参考。涉及产品优化和生产效率改善，ChipNobo 有权调整产品指标和部分技术参数的升级，所出现信息披露过程存在延后或者不能送达的情形，ChipNobo 有获免责权。

The product listed herein is designed to be used with residential and commercial equipment, and do not support sensitive items and specialized equipment in areas where sanctions do exist. ChipNobo Co., Ltd or anyone on its behalf, assumes no responsibility or liability for any damages resulting from improper use.

此处列出的产品旨在民用和商业设备上使用，不支持确有制裁地区的敏感项目和特殊设备，ChipNobo 有限公司或其代表，对因不当使用而造成的任何损害不承担任何责任。

For additional information, please visit our website <http://www.chipnobo.com>, or consult your nearest Chipnobo sales office for further assistance.

欲了解更多信息，请访问我们的网站 <http://www.chipnobo.com>，或咨询离您最近的 Chipnobo 销售办事处以获得进一步帮助。