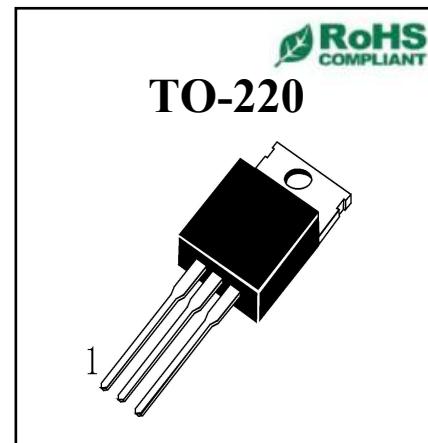
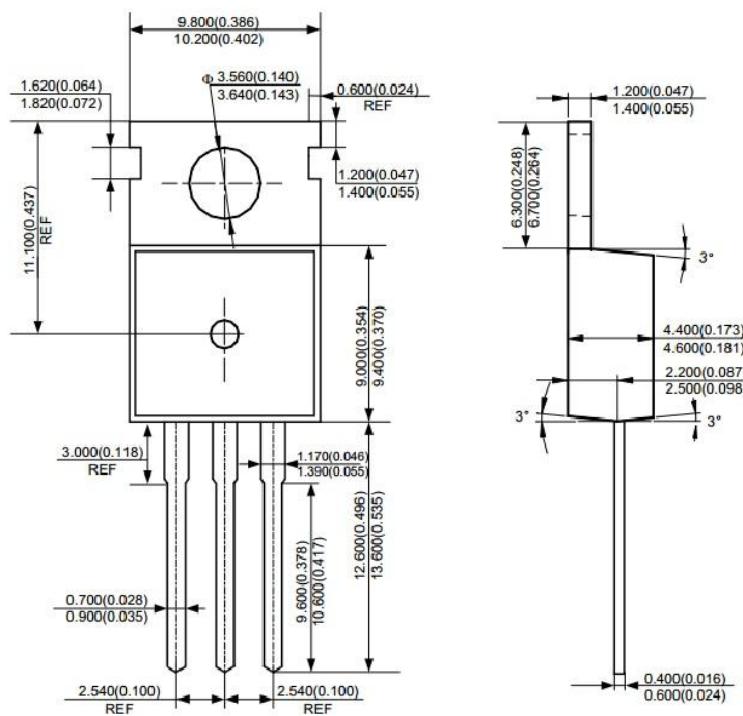
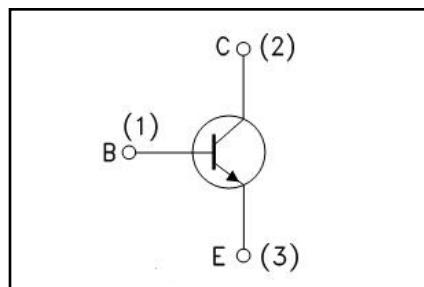


High Voltage Fast-Switching NPN Power Transistor**◆ Features:**

- ◆ High Switching Speed
开关速度快
- ◆ Low forward voltage drop
正向压降低
- ◆ High efficiency and low power loss
高效低功耗
- ◆ High current surge capability
大电流浪涌能力强

**◆ Applications**

- ◆ Electronic Ballast
电子镇流器
- ◆ Switching Mode Power Supply
开关电源
- ◆ Motor Controls
电机控制
- ◆ Solenoid/Relay drivers and Deflection circuits applications
电磁阀/继电器驱动器和偏转电路应用





BU406

<http://www.osen.net.cn>

High Voltage Fast-Switching NPN Power Transistor

◆ Absolute Maximum Ratings (Tc=25°C)

| Symbol | Parameters | Ratings | Unit |
|--------|--------------------------------------------|------------|------|
| VCBO | Collector-Base Voltage 集电极 - 基极电压 | 400 | V |
| VCEO | Collector-Emitter Voltage 集电极 - 发射极电压 | 200 | V |
| VEBO | Emitter-Base Voltage 发射极 - 基极电压 | 9 | V |
| Ic | Collector Current-Continuous 集电极连续电流 | 7 | A |
| IB | Base Current-Continuous 基极连续电流 | 4 | A |
| PC | Collector Power Dissipation 耗散功率 | 60 | W |
| Tj | Max.Operating junction temperature 最大结温 | 150 | °C |
| Tstg | Storage Temperature 存储温度 | -55 ~ +150 | °C |
| θ JC | Junction to Case 结到外壳 | 2.08 | °C/W |

◆ Electrical characteristics (Tc=25°C unless otherwise noted)

| Symbol | Parameters | Min | Typ | Max | Units | Conditions |
|----------------------|------------------------------------------------------------|------------|-----|------------|-------|-------------------------------------------------------|
| I _{CBO} | Collector Cutoff Current 集电极截止电流 | -- | -- | 10 | uA | V _{CB} =400V, I _B =0 |
| I _{EBO} | Emitter Cutoff Current 发射极截止电流 | -- | -- | 10 | uA | V _{EB} =9V, I _C =0 |
| BV _{CEO} | Collector Emitter Sustaining voltage(Note 1) 集电极发射极持续电压 | 200 | -- | -- | V | I _C =100mA, I _B =0 |
| V _{CЕ(sat)} | Collector Emitter Saturation Voltage(Note 1) 集电极发射极饱和电压 | -- | -- | 1.0 | V | I _C =5A, I _B =1A |
| V _{BE(sat)} | Base-Emitter Saturation Voltage(Note 1) 基极发射极饱和电压 | -- | -- | 1.5 | V | I _C =2A, I _B =0.4A |
| h _{FE} | DC Current Gain(Note 1) 直流电流增益 | 50 | -- | 85 | | I _C =2A, V _{CE} =5V |
| f _T | Current-Gain—Bandwidth 电流增益带宽 | 10 | -- | -- | MHz | V _{CE} =10V, I _C =0.5A, f=1MHz |
| T _s | 贮存时间 | 1.0 | -- | 2.5 | us | I _C =500mA, UI9600 |
| T _r | 上升时间 | - | -- | 1 | us | |
| T _f | 下降时间 | -- | -- | 1 | us | |

Note 1: Pulse test: PW <= 300us , duty cycle <= 2%.