# MBRF20300CT-OSEN

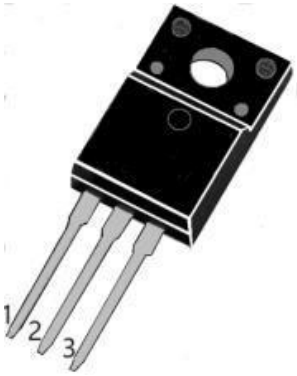
## Power Schottky Rectifier - 20Amp 300Volt

### ◆ Features:

- ✧ High switching frequency
  开关频率高
- ✧ Low forward voltage drop
  正向压降低
- ✧ High efficiency and low power loss
  高效低功耗
- ✧ High volume of current and good capability of surge current
  大电流浪涌能力强

RoHS COMPLIANT

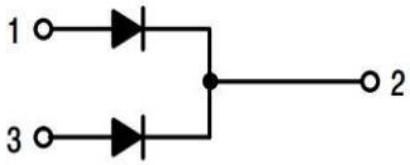
**TO-220F**

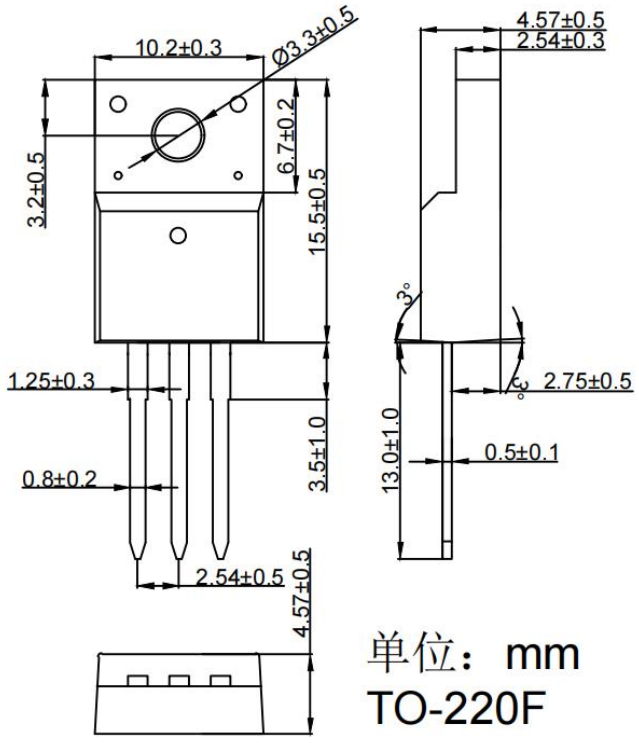



### ◆ Applications

- ✧ High frequency rectifier of switching mode power supplies
  高频整流器开关电源
- ✧ Freewheeling diodes
  续流二极管
- ✧ Polarity protection application
  极性保护应用
- ✧ DC-DC converters
  直流-直流变换器

**PIN CONNECTIONS**




单位：mm

TO-220F

## ◆ Absolute Maximum Ratings (Tc=25°C)

| Symbol | Parameters | Ratings | Unit |
|---|---|---|---|
| $V_{RRM}$ | Repetitive Peak Reverse Voltage<br>最大反向重复峰值电压 | **300** | V |
| $V_{RWM}$ | Working peak reverse voltage<br>反向峰值工作电压 | **300** | V |
| $V_R$ | Maximum DC blocking voltage<br>最大直流反向电压 | **300** | V |
| $I_{F(AV)}$ | Maximum average forward rectified current Total device<br>最大正向平均电流 | **20** | A |
| $I_{FSM}$ | Peak Forward Surge Current<br>正向峰值浪涌电流 | **200** | A |
| $T_j$ | Operating junction temperature range<br>结温 | **175** | ℃ |
| $T_{stg}$ | Storage temperature range<br>贮存温度 | **-55~175** | ℃ |

## ◆ Electrical characteristics

| Symbol | Parameters | Min | Typical | Max | Units | Conditions |
|---|---|---|---|---|---|---|
| $I_R$ | Maximum Reverse Leakage Current （Note 1）<br>最大反向瞬态电流 | -- | -- | **5** | uA | $V_R=V_{RRM}$<br>$T_C$ = 25 °C |
| $V_F$ | Maximum Instantaneous Forward Voltage（Note 2）<br>最大瞬态正向压降 | -- | **0.92** | **1.06** | V | $I_F$= 20A，$T_C$ = 25 °C |
| $R_{th(j-c)}$ | Typical Thermal Resistance,Junction to Case<br>结到外壳的典型热阻 | -- | -- | **3.5** | °C/W | |
| dV/dt | Voltage Rate of Change<br>电压变化率 | -- | -- | **10000** | V/μs | |

Note 1: 2.0uS Pulse Width, f=1.0KHz

Note 2: Pulse Test : 300us Pulse Width, 1% Duty Cycle

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