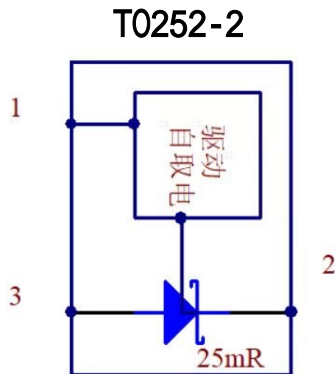


ACTIVE LOW VF SCHOTTKY RECTIFIER



FEATURES

- Low forward voltage **0.05V**
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

APPLICATIONS

Low VF Schottky barrier rectifier are designed for high frequency, miniature switched mode power supplies such as adapters ,lighting and on-board DC/DC conerters

支持并适应PWM或PFM所有的振荡模式
有源续流二极管，支持到8A，压降0.05V
支持DC-DC的SW脚开关频率到200KHZ

自取电，专为DcDc度身优化
用有源续流二极管可以大幅度提高异步
DCDC效率（3%左右 @5A），减低系统热量

反向耐压100V, 超结25mR NMOS

Primary Characteristic

| | |
|------------|--------------|
| I_o | 8A |
| V_{RRM} | 100V |
| I_{FSM} | 1A |
| V_F | 0.05V |
| T_{jmax} | 150°C |

Maximum Ratings at Ta=25°C unless otherwise specified

| Characteristics | Symbol | Value | Unit |
|---|-----------------|-------------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 100 | V |
| Working Peak Reverse Voltage | V_{RWM} | 100 | V |
| Maximum DC Blocking Voltage | V_{DC} | 100 | V |
| Maximum Average Forward Rectified Current | I_o | 10 | A |
| Peak Forward Surge Current,8.3 ms Single Half Sine-wave | I_{FSM} | 1 | A |
| Operating Temperature Range | T_J | -50 to +150 | °C |
| Storage Temperature Range | T_{STG} | -50 to +150 | °C |
| Typical Thermal Resistance (Note1) TO-252 | $R_{\theta JC}$ | 3 | °C/W |

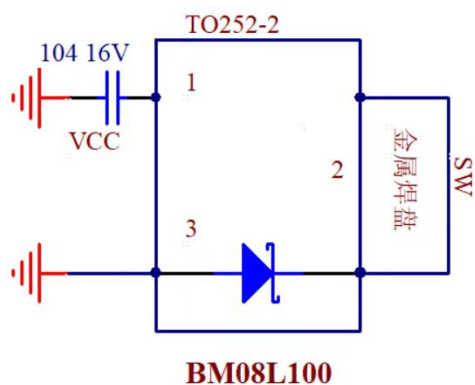
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics unless otherwise specified

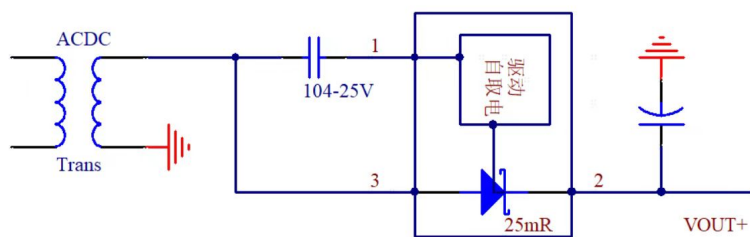
| Characteristics | | Symbol | Value | | Unit |
|---------------------------------------|-------------|--------|---------|------|------|
| Forward Voltage Drop(Note2) | at $I_F=3A$ | V_F | Typ. | Max. | V |
| | | | TA=25°C | 0.04 | |
| TA=125°C | 0.043 | | - | | |
| at $I_F=5A$ | TA=25°C | | 0.061 | - | |
| | TA=125°C | | 0.08 | - | |
| at $I_F=8A$ | TA=25°C | | | | |
| | TA=125°C | | | | |
| Maximum Reverse Current at $V_R=100V$ | TA=25°C | I_R | | 50 | µA |
| | TA=125°C | | 5 | - | mA |

Note2:Pulse test: 300 µs pulse width, 1 % duty cycle

应用电路



支持DCDC 振荡频率不超过200KHz
支持空载轻载重载SW的各种波形，同步整流防死区



支持ACDC次级同步 支持+5V与+12V输出36瓦 max

封装信息

TO-252

