

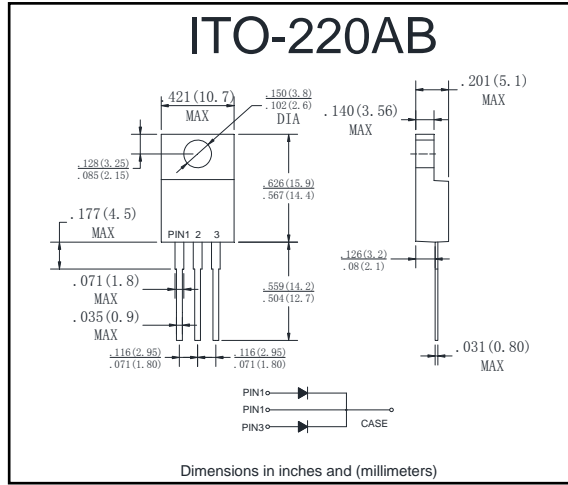


肖特基二极管 SCHOTTKY Diodes

■特征 Features

- 耐正向浪涌电流能力高
High surge forward current capability
- 低功耗, 大电流
Low Power loss, High efficiency
- I_o 15.0A
- V_{RRM} 40-200V

■外形尺寸和印记 Outline Dimensions and Mark



■用途 Applications

- 快速整流用
High speed switching

■极限值 (绝对最大额定值)

Limiting Values (Absolute Maximum Rating)

| 参数名称 Item | 符号 Symbol | 单位 Unit | 条件 Conditions | MBR15-FCT | | | | | |
|---|--------------|------------|---|------------|----|----|-----|-----|-----|
| | | | | 40 | 60 | 80 | 100 | 150 | 200 |
| 反向重复峰值电压 Repetitive Peak Reverse Voltage | V_{RRM} | V | | 40 | 60 | 80 | 100 | 150 | 200 |
| 平均整流输出电流 Average Rectified Output Current | I_o | A | 正弦半波 60Hz, 电阻负载, T_c (Fig.1) 60HZ Half-sine wave, Resistance load, T_c (Fig.1) | 15 | | | | | |
| 正向(不重复)浪涌电流 Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60HZ正弦波, 一个周期, $T_a=25^\circ C$ 60HZ sine wave, 1 cycle, $T_a=25^\circ C$ | 100 | | | | | |
| 正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time | I^2t | A^2s | $1ms \leq t < 8.3ms$ $T_j=25^\circ C$, 单个二极管 $1ms \leq t < 8.3ms$ $T_j=25^\circ C$, Rating of per diode | 41 | | | | | |
| 贮存温度 Storage Temperature | T_{stg} | $^\circ C$ | | -55 ~ +150 | | | | | |
| 结温 Junction Temperature | T_j | $^\circ C$ | 在正向直流条件下, 没有施加反向压降, 通电 ≤ 1 h (图示1) ① IN DC Forward Mode-Forward Operations, without reverse bias, $t \leq 1$ h (Fig. 1) ① | -55 ~ +150 | | | | | |

■电特性 ($T_a=25^\circ C$ 除非另有规定)

Electrical Characteristics ($T_a=25^\circ C$ Unless otherwise specified)

| 参数名称 Item | 符号 Symbol | 单位 Unit | 测试条件 Test Condition | MBR15-FCT | | | | | |
|--------------------------------|------------------|--------------|------------------------------------|-------------------|------|------|-----|------|------|
| | | | | 40 | 60 | 80 | 100 | 150 | 200 |
| 正向峰值电压 Peak Forward Voltage | V_{FM} | V | $I_{FM} = 7.5A$ | 0.55 | 0.75 | 0.85 | | 0.90 | 0.95 |
| 反向峰值电流 Peak Reverse Current | I_{RRM1} | mA | $V_{RM} = V_{RRM}$ | $T_a=25^\circ C$ | | 0.1 | | | |
| | I_{RRM2} | | | $T_a=100^\circ C$ | | 20 | | | |
| 热阻 Thermal Resistance | $R_{\theta J-C}$ | $^\circ C/W$ | 结和壳之间 Between junction and case | 2.0 | | | | | |

■备注 NOTE

① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

■ 特性曲线 (典型) Characteristics(Typical)

图1: 正向电流降额曲线

FIG1: IF (AV) --Tc Derating

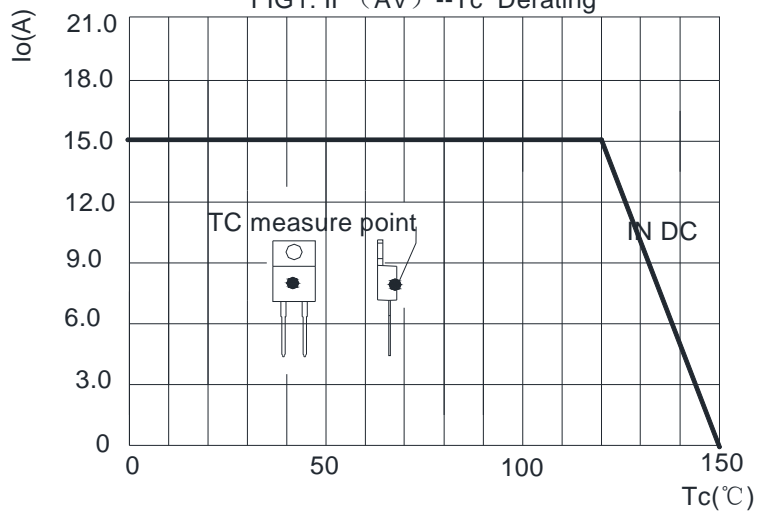


图2: 耐正向浪涌电流曲线

FIG2: Surge Forward Current Capacity

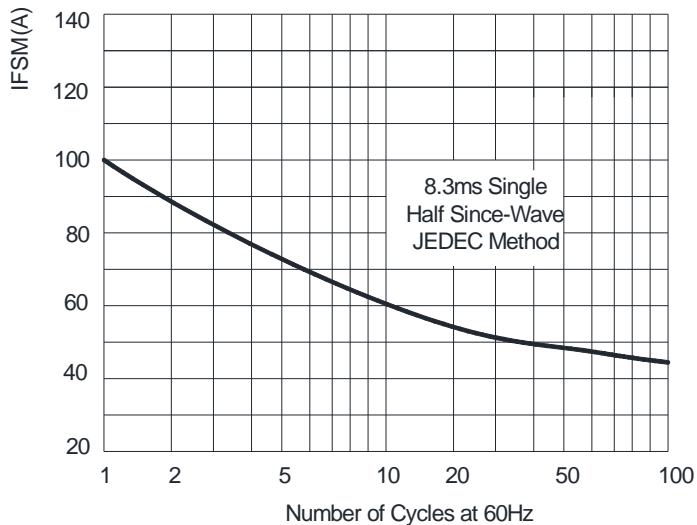


图3: 正向电压曲线

FIG3: Instantaneous Forward Voltage

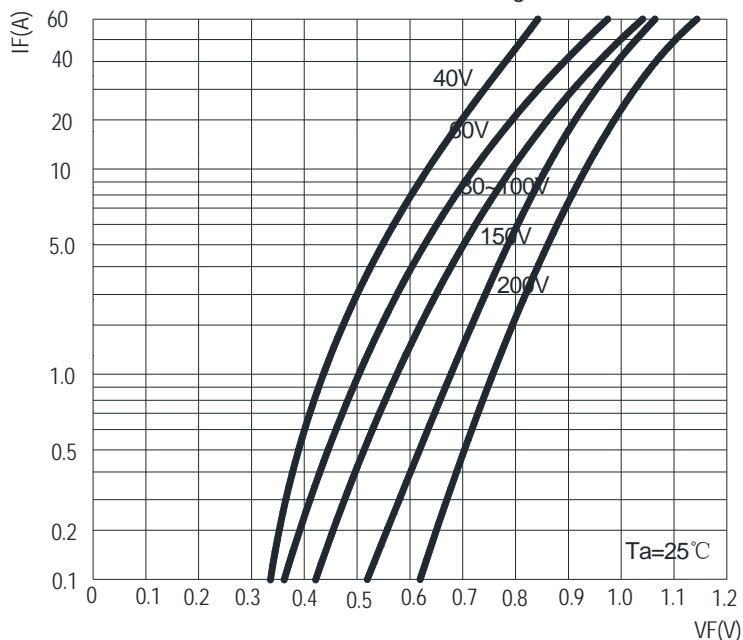


图4: 反向电流曲线

FIG4: Typical Reverse Characteristics

