

D1FM3

30V 5A

特長

- 小型 SMD
- 高速スイッチング
- 低  $V_F$
- AEC-Q101 準拠

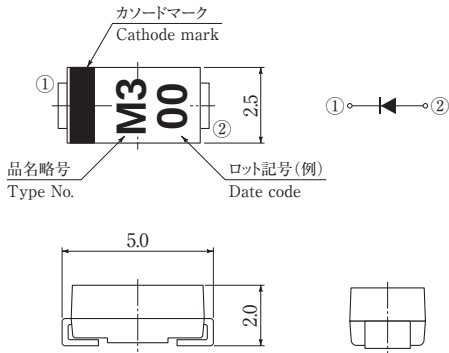
Feature

- Small SMD
- High Recovery Speed
- Low  $V_F$
- Based on AEC-Q101

■ 外観図 OUTLINE

Package : 1F

Unit : mm



外形図については新電元 Web サイトをご参照下さい。捺印表示については捺印仕様をご確認下さい。  
For details of the outline dimensions, refer to our web site. As for the marking, refer to the specification "Marking, Terminal Connection".

■ 定格表 RATINGS

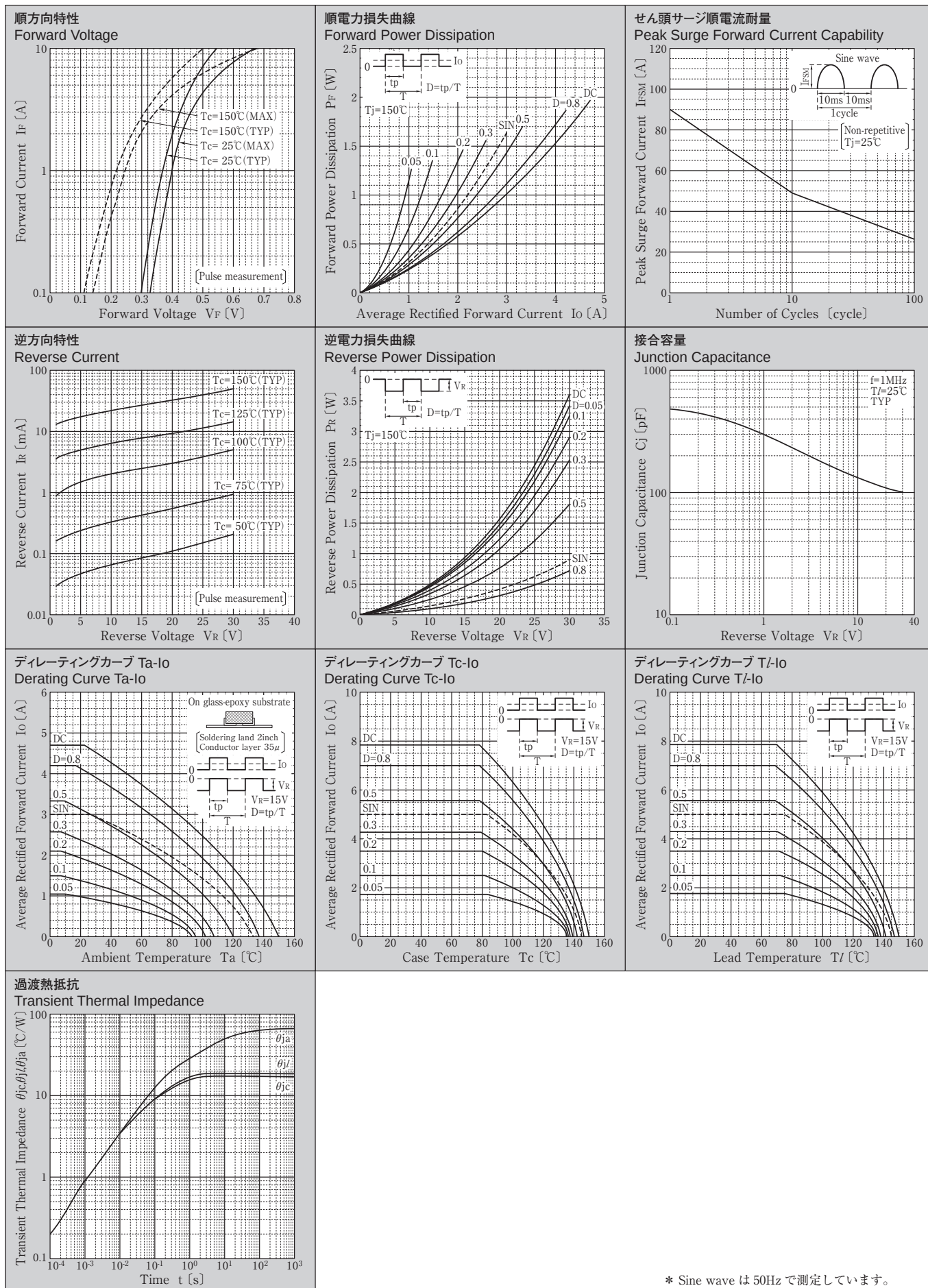
● 絶対最大定格 Absolute Maximum Ratings (指定のない場合  $T_c = 25^\circ\text{C}$  / unless otherwise specified)

| 項目<br>Item                                | 記号<br>Symbol | 条件<br>Conditions                                                                                                                    | 規格値<br>Ratings                                                | 単位<br>Unit       |
|-------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|------------------|
| 保存温度<br>Storage Temperature               | $T_{stg}$    |                                                                                                                                     | - 55 ~ 150                                                    | $^\circ\text{C}$ |
| 接合部温度<br>Operation Junction Temperature   | $T_j$        |                                                                                                                                     | 150                                                           | $^\circ\text{C}$ |
| せん頭逆電圧<br>Maximum Reverse Voltage         | $V_{RM}$     |                                                                                                                                     | 30                                                            | V                |
| 出力電流<br>Average Rectified Forward Current | $I_o$        | 50Hz 正弦波, 抵抗負荷<br>50Hz sine wave, Resistance load                                                                                   | $T_a = 25^\circ\text{C}$ プリント基板実装<br>On glass-epoxy substrate | A                |
|                                           |              |                                                                                                                                     | $T_c = 83^\circ\text{C}$                                      |                  |
| せん頭サー ジ順電流<br>Peak Surge Forward Current  | $I_{FSM}$    | 50Hz 正弦波, 非繰り返し 1 サイクルせん頭値, $T_j = 25^\circ\text{C}$<br>50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j = 25^\circ\text{C}$ | 90                                                            | A                |

● 電氣的・熱的特性 Electrical Characteristics (指定のない場合  $T_c = 25^\circ\text{C}$  / unless otherwise specified)

|                              |               |                                                                    |          |                           |
|------------------------------|---------------|--------------------------------------------------------------------|----------|---------------------------|
| 順電圧<br>Forward Voltage       | $V_F$         | $I_F = 1.0\text{A}$ , パルス測定<br>Pulse measurement                   | MAX 0.40 | V                         |
|                              |               | $I_F = 3.0\text{A}$ , パルス測定<br>Pulse measurement                   | MAX 0.46 |                           |
| 逆電流<br>Reverse Current       | $I_R$         | $V_R = V_{RM}$ , パルス測定<br>Pulse measurement                        | MAX 0.1  | mA                        |
| 接合容量<br>Junction Capacitance | $C_j$         | $f = 1\text{MHz}$ , $V_R = 10\text{V}$                             | TYP 130  | pF                        |
| 熱抵抗<br>Thermal Resistance    | $\theta_{jc}$ | 接合部・ケース間<br>Junction to case                                       | MAX 16   | $^\circ\text{C}/\text{W}$ |
|                              | $\theta_{jl}$ | 接合部・リード間<br>Junction to lead                                       | MAX 18   |                           |
|                              | $\theta_{ja}$ | 接合部・周囲間, プリント基板実装<br>Junction to ambient, On glass-epoxy substrate | MAX 65   |                           |

# 特性図 CHARACTERISTIC DIAGRAMS



\* Sine wave は 50Hz で測定しています。  
\* 50Hz sine wave is used for measurements.

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工作機器、パーソナル機器、産業用機器等

### 【特別用途】

輸送機器(車載、船舶等)、基幹用通信機器、交通信号機器、防災/防犯機器、各種安全機器、医療  
機器等

### 【特定用途】

原子力制御システム、航空機器、航空宇宙機器、海底中継機器、生命維持のための装置、システム  
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