

M1FL40U

400V 1.5A

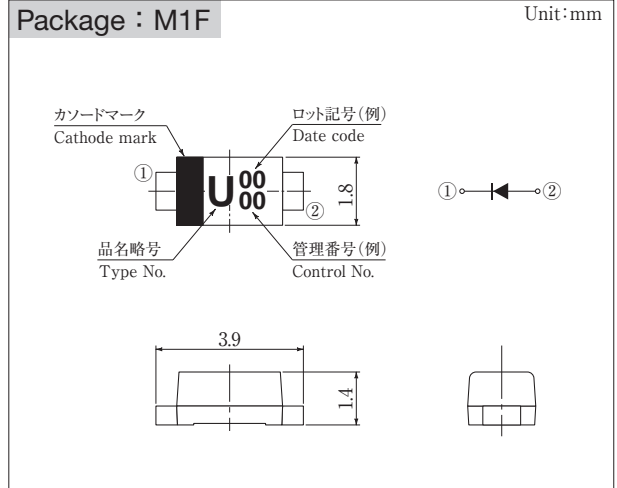
特長

- 高耐圧
- 超高速スイッチング
- 小型SMD

Feature

- High Voltage
- Ultra-High Recovery Speed
- Small SMD

外観図 OUTLINE



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

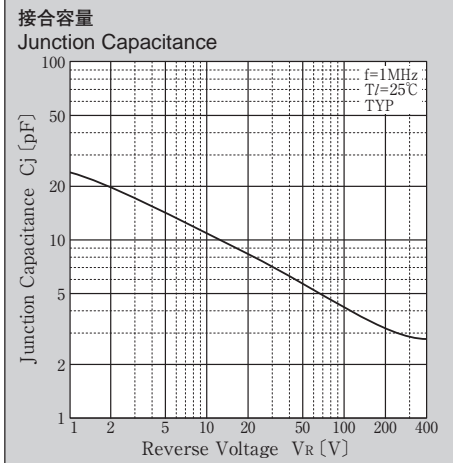
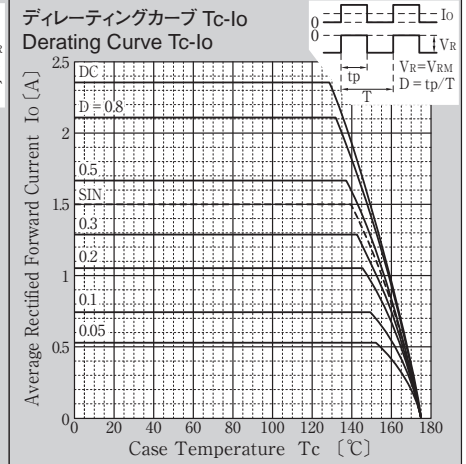
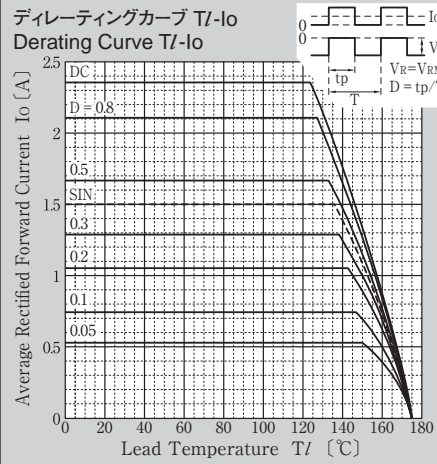
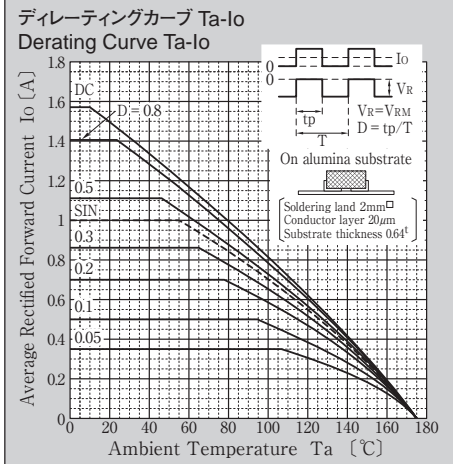
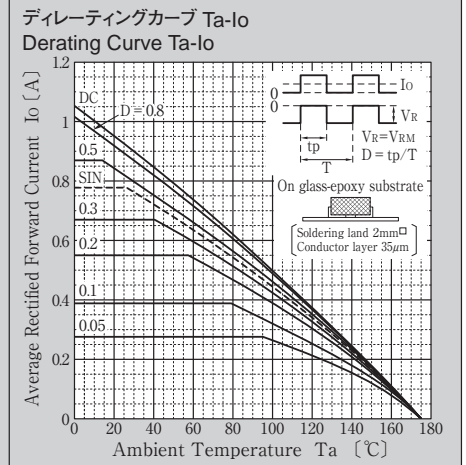
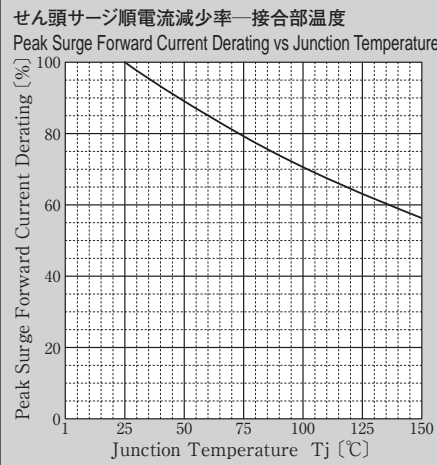
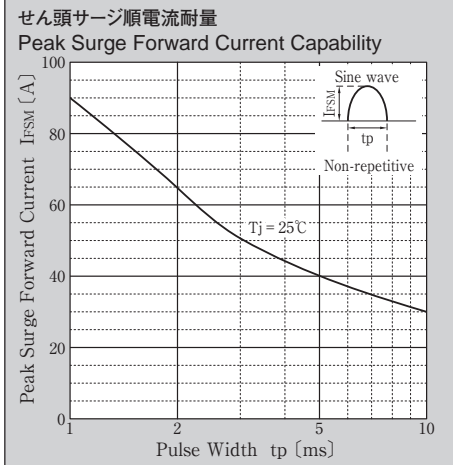
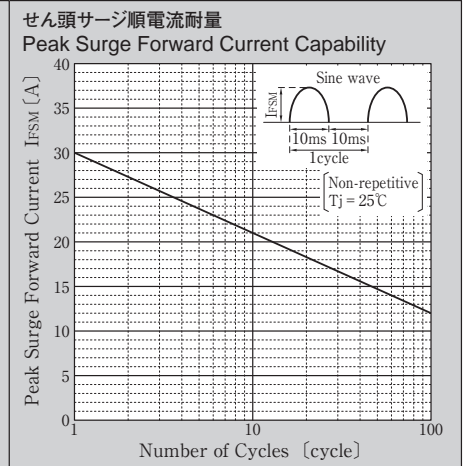
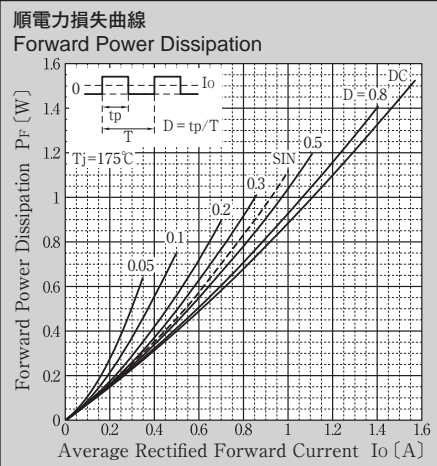
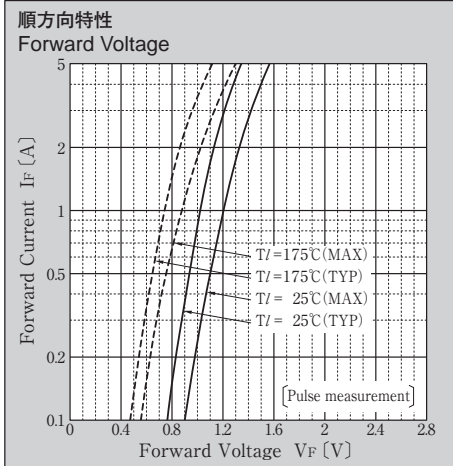
● 絶対最大定格 Absolute Maximum Ratings (指定のない場合 $T_l = 25^\circ\text{C}$ / Unless otherwise specified)

| 項目 Item | 記号 Symbol | 条件 Conditions | 規格値 Ratings | 単位 Unit |
|---|--------------|--|----------------|------------------|
| 保存温度 Storage Temperature | T_{stg} | | - 55 ~ 175 | $^\circ\text{C}$ |
| 接合部温度 Operation Junction Temperature | T_j | | 175 | $^\circ\text{C}$ |
| せん頭逆電圧 Maximum Reverse Voltage | V_{RM} | | 400 | V |
| 出力電流 Average Rectified Forward Current | I_o | 50Hz 正弦波, 抵抗負荷, プリント基板実装 $T_a = 25^\circ\text{C}$ 50Hz sine wave, Resistance load, On glass-epoxy substrate $T_a = 25^\circ\text{C}$ | 0.78 | A |
| | | 50Hz 正弦波, 抵抗負荷, アルミナ基板実装 $T_a = 54^\circ\text{C}$ 50Hz sine wave, Resistance load, On alumina substrate $T_a = 54^\circ\text{C}$ | 1.0 | |
| | | 50Hz 正弦波, 抵抗負荷, $T_l = 135^\circ\text{C}$ 50Hz sine wave, Resistance load, $T_l = 135^\circ\text{C}$ | 1.5 | |
| | | 50Hz 正弦波, 抵抗負荷, $T_c = 139^\circ\text{C}$ 50Hz sine wave, Resistance load, $T_c = 139^\circ\text{C}$ | 1.5 | |
| せん頭サージ順電流 Peak Surge Forward Current | I_{FSM} | 50Hz 正弦波, 非繰り返し1サイクルせん頭値, $T_j = 25^\circ\text{C}$ 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j = 25^\circ\text{C}$ | 30 | A |
| | I_{FSM1} | $t_p = 1\text{ms}$ 正弦波, 非繰り返し1サイクルせん頭値, $T_j = 25^\circ\text{C}$ $t_p = 1\text{ms}$ 50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j = 25^\circ\text{C}$ | 90 | |

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

| | | | | |
|--------------------------------|---------------|--|---------|---------------------------|
| 順電圧 Forward Voltage | V_F | $I_F = 1.0\text{A}$, パルス測定 Pulse measurement | MAX 1.2 | V |
| 逆電流 Reverse Current | I_R | $V_R = 400\text{V}$, パルス測定 Pulse measurement | MAX 10 | μA |
| 逆回復時間 Reverse Recovery Time | t_{rr} | $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $0.25 I_R$ | MAX 25 | ns |
| 接合容量 Junction Capacitance | C_j | $f = 1\text{MHz}$, $V_R = 10\text{V}$ | TYP 11 | pF |
| 熱抵抗 Thermal Resistance | θ_{ja} | 接合部・周囲間, プリント基板実装 Junction to ambient, On glass-epoxy substrate | MAX 186 | $^\circ\text{C}/\text{W}$ |
| | | 接合部・周囲間, アルミナ基板実装 Junction to ambient, On alumina substrate | MAX 108 | |
| | θ_{jl} | 接合部・リード間 Junction to lead | MAX 20 | |
| | θ_{jc} | 接合部・ケース間 Junction to case | MAX 18 | |

■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
等

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