

SG40TC12M

120V 40A

## 特長

- $T_j = 175^\circ\text{C}$
- 低  $I_R = 60\mu\text{A}$
- 熱暴走を起こしにくい

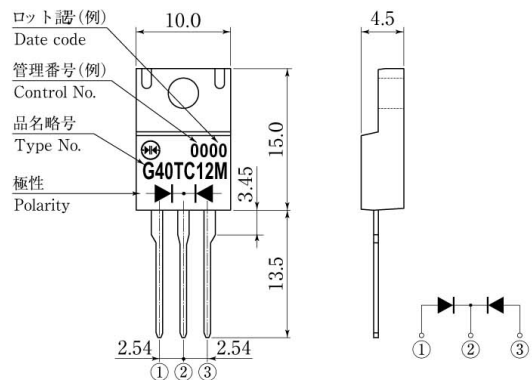
## Feature

- $T_j = 175^\circ\text{C}$
- Low  $I_R = 60\mu\text{A}$
- Resistance for thermal run-away

## ■外観図 OUTLINE

Package : FTO-220G (3pin)

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

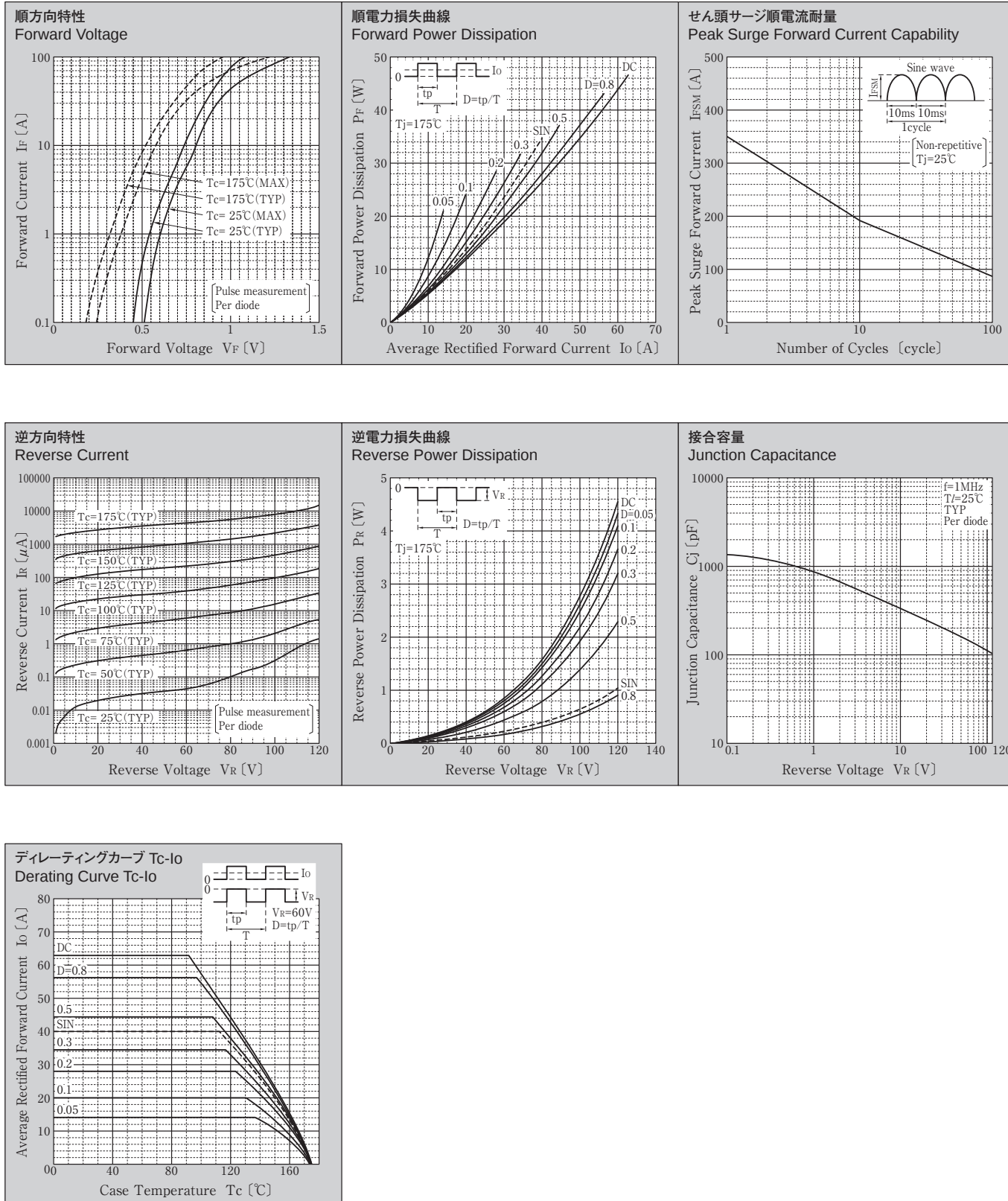
●絶対最大定格 Absolute Maximum Ratings (指定のない場合  $T_c = 25^\circ\text{C}$  / unless otherwise specified)

| 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 ~ 175     | $^\circ\text{C}$        |
| 接合部温度<br>Operating Junction Temperature   | $T_j$        |                                                                                                                                                      | 175            | $^\circ\text{C}$        |
| せん頭逆電圧<br>Maximum Reverse Voltage         | $V_{RM}$     |                                                                                                                                                      | 120            | V                       |
| 出力電流<br>Average Rectified Forward Current | $I_o$        | 50Hz 正弦波, 抵抗負荷, 1 素子当りの出力電流平均値 $I_o/2$ , $T_c = 112^\circ\text{C}$<br>50Hz sine wave, Resistance load, Per diode $I_o/2$ , $T_c = 112^\circ\text{C}$ | 40             | A                       |
| 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, $T_j = 25^\circ\text{C}$                  | 350            | A                       |
| 絶縁耐圧<br>Dielectric Strength               | $V_{dis}$    | 一括端子・ケース裏面間, AC 1 分間印加<br>Terminals to case backside, AC 1 minute                                                                                    | 1.5            | kV                      |
| 締め付けトルク<br>Mounting Torque                | TOR          | (推奨値 : $0.3\text{N}\cdot\text{m}$ )<br>(Recommended torque : $0.3\text{N}\cdot\text{m}$ )                                                            | 0.5            | $\text{N}\cdot\text{m}$ |

●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       | $V_F$         | $I_F = 20\text{A}$ , パルス測定, 1 素子当りの規格値<br>Pulse measurement, Per diode  | MAX 0.87<br>TYP 0.81 | V                         |
| 逆電流<br>Reverse Current       | $I_R$         | $V_R = 120\text{V}$ , パルス測定, 1 素子当りの規格値<br>Pulse measurement, Per diode | MAX 60               | $\mu\text{A}$             |
| 接合容量<br>Junction Capacitance | $C_j$         | $f = 1\text{MHz}$ , $V_R = 10\text{V}$ , 1 素子当りの規格値<br>Per diode        | TYP 336              | pF                        |
| 熱抵抗<br>Thermal Resistance    | $\theta_{jc}$ | 接合部・ケース間<br>Junction to case                                            | MAX 1.8              | $^\circ\text{C}/\text{W}$ |

# **■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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### 【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】

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