

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

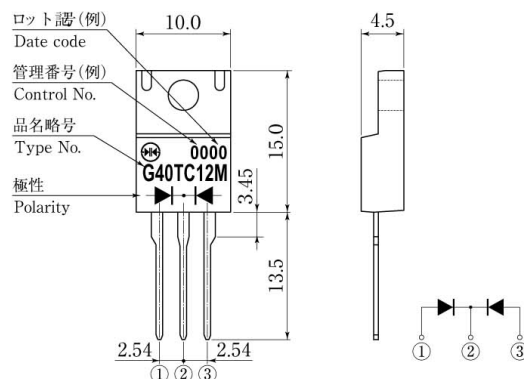
Feature

- $T_j = 175^\circ\text{C}$
- 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

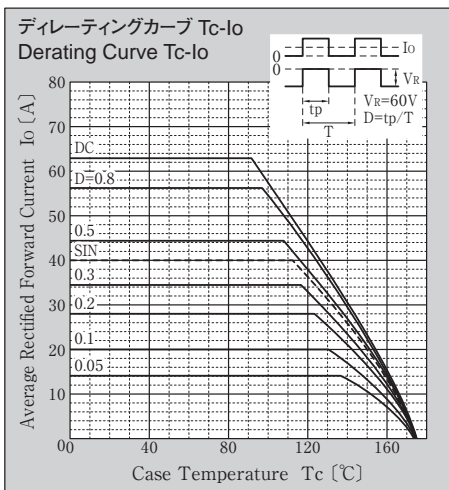
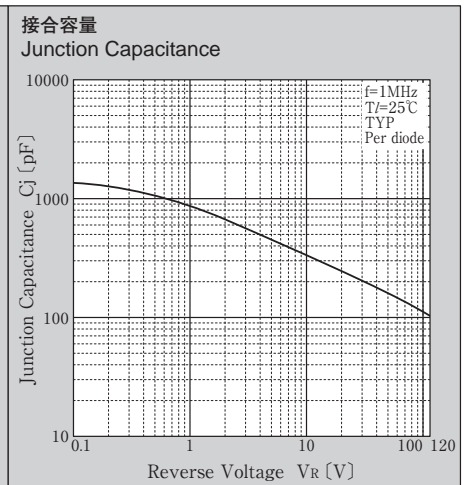
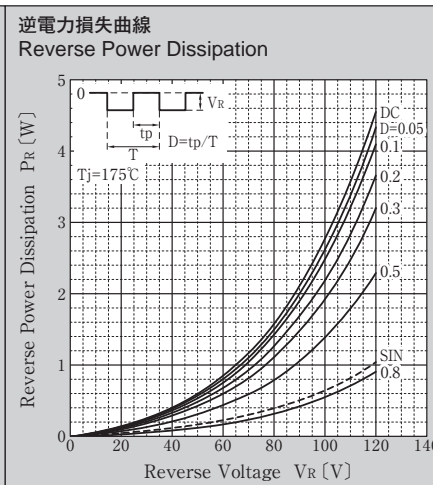
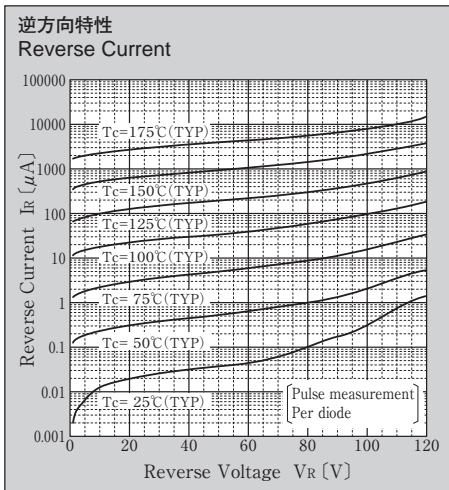
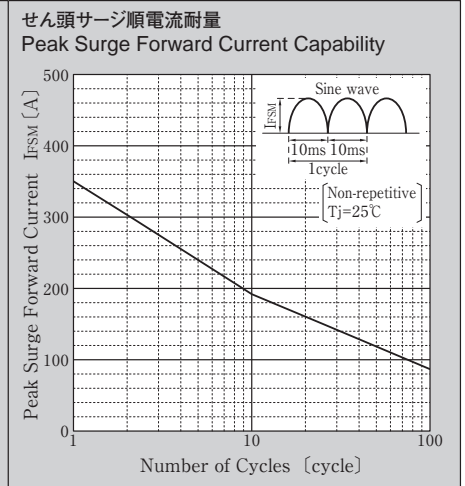
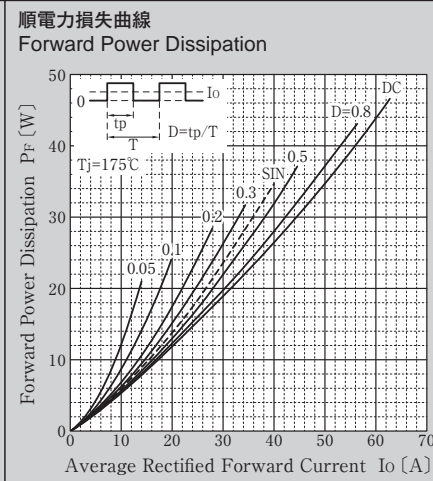
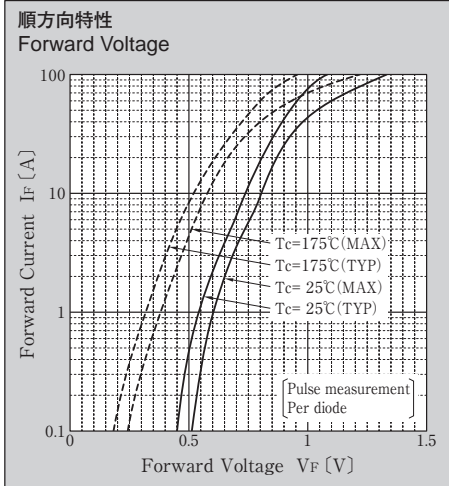
●絶対最大定格 Absolute Maximum Ratings (指定のない場合 $T_c = 25^\circ\text{C}$ / unless otherwise specified)

| 項目 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 Operating Junction Temperature | T_j | | 175 | $^\circ\text{C}$ |
| せん頭逆電圧 Maximum Reverse Voltage | V_{RM} | | 120 | V |
| 出力電流 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 $I_o/2$, $T_c = 112^\circ\text{C}$ 50Hz sine wave, Resistance load, Per diode $I_o/2$, $T_c = 112^\circ\text{C}$ | 40 | A |
| せん頭サーージ順電流 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, $T_j = 25^\circ\text{C}$ | 350 | A |
| 絶縁耐圧 Dielectric Strength | V_{dis} | 一括端子・ケース裏面間, AC 1 分間印加 Terminals to case backside, AC 1 minute | 1.5 | kV |
| 締め付けトルク Mounting Torque | TOR | (推奨値: $0.3\text{N}\cdot\text{m}$) (Recommended torque: $0.3\text{N}\cdot\text{m}$) | 0.5 | $\text{N}\cdot\text{m}$ |

●電気的・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 Forward Voltage | V_F | $I_F = 20\text{A}$, パルス測定, 1 素子当りの規格値 Pulse measurement, Per diode | MAX 0.87 TYP 0.81 | V |
| 逆電流 Reverse Current | I_R | $V_R = 120\text{V}$, パルス測定, 1 素子当りの規格値 Pulse measurement, Per diode | MAX 60 | μA |
| 接合容量 Junction Capacitance | C_j | $f = 1\text{MHz}$, $V_R = 10\text{V}$, 1 素子当りの規格値 Per diode | TYP 336 | pF |
| 熱抵抗 Thermal Resistance | θ_{jc} | 接合部・ケース間 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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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、海中継機器、生命維持のための装置、システム
等

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