

SG10SC3LM

30V 10A

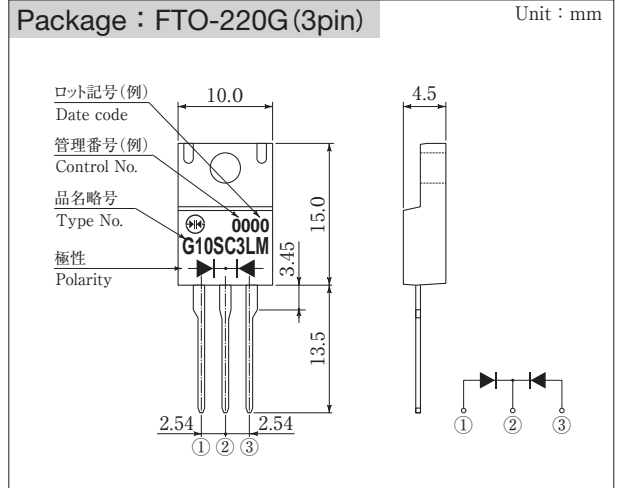
## 特長

- 低  $V_F$
- 低ノイズ
- 高速スイッチング

## Feature

- Low  $V_F$
- Low Noise
- High Recovery Speed

## ■ 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

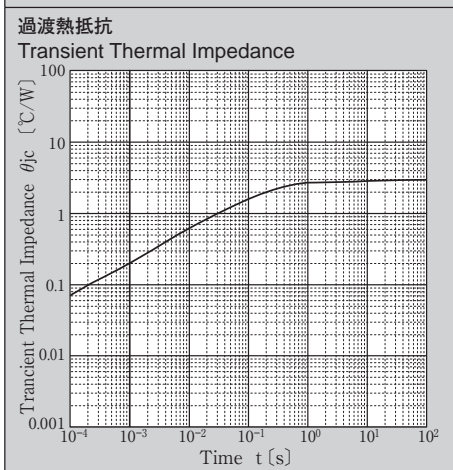
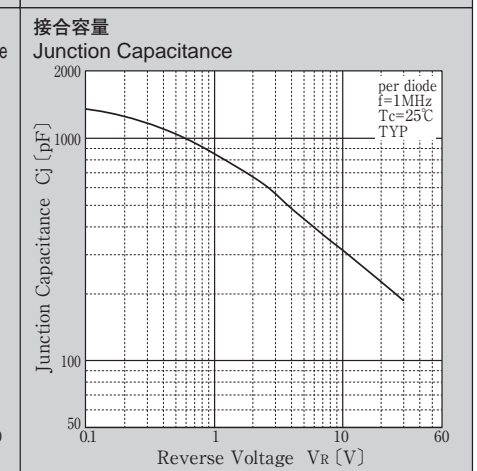
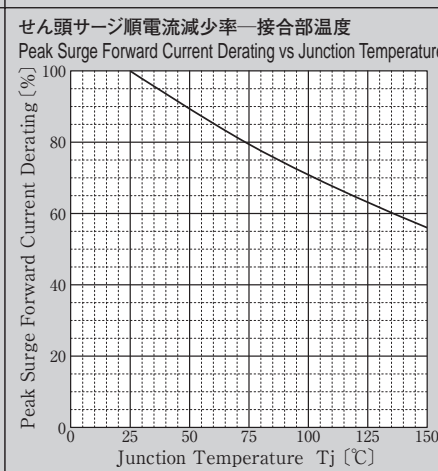
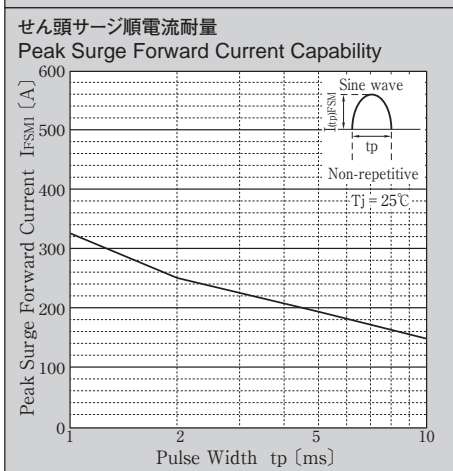
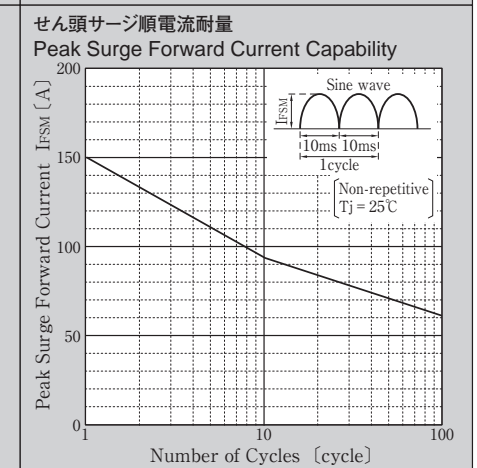
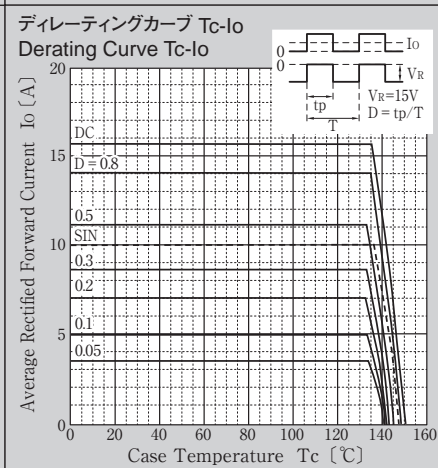
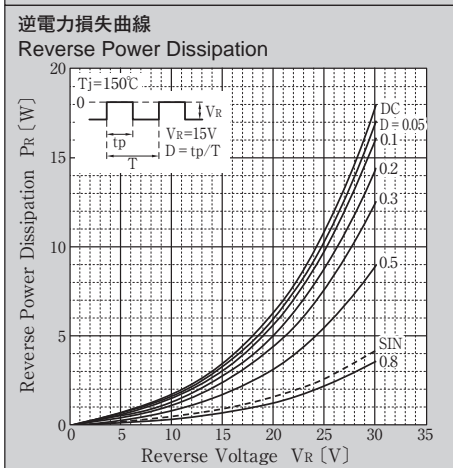
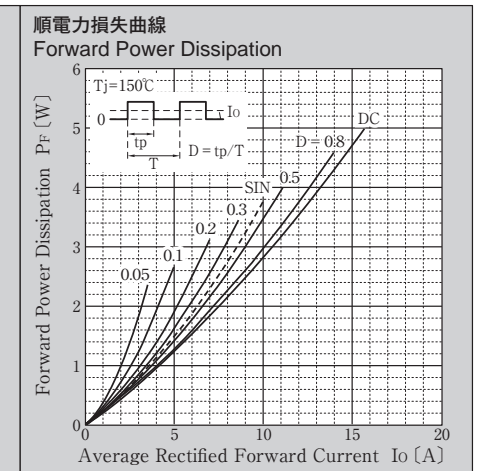
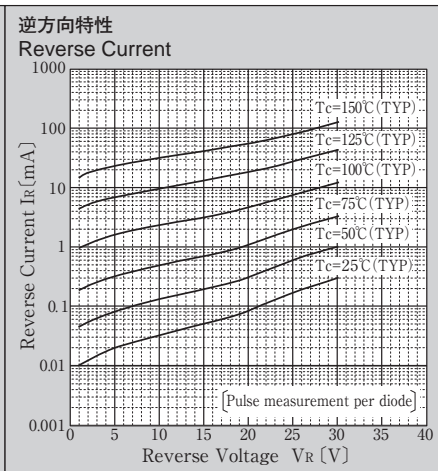
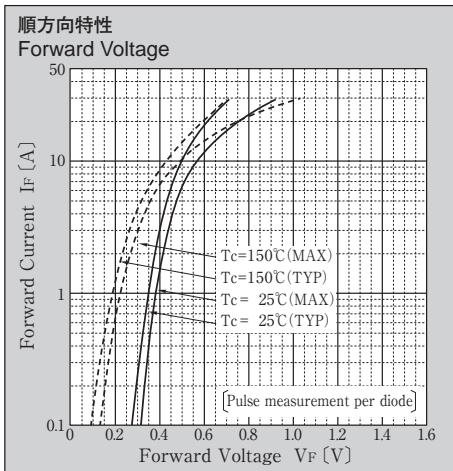
● 絶対最大定格 Absolute Maximum Ratings (指定のない場合は  $T_c = 25^\circ\text{C}$  / unless otherwise specified)

| 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>Operating Junction Temperature                | $T_j$        |   | 150            | $^\circ\text{C}$        |
| せん頭逆電圧<br>Maximum Reverse Voltage                      | $V_{RM}$     |   | 30             | V                       |
| 繰り返しせん頭サージ逆電圧<br>Repetitive Peak Surge Reverse Voltage | $V_{RRSM}$   | パルス幅 0.5ms, duty 1/40<br>Pulse width 0.5ms, duty 1/40   | 35             | V                       |
| 出力電流<br>Average Rectified Forward Current              | $I_o$        | 50Hz 正弦波, 抵抗負荷, 一素子当りの出力電流平均値 $I_o/2$ , $T_c=136^\circ\text{C}$<br>50Hz sine wave, Resistance load, Rating for each diode $I_o/2$ , $T_c=136^\circ\text{C}$ | 10             | 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, $T_j=25^\circ\text{C}$                             | 150            | 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, $T_j=25^\circ\text{C}$<br>$t_p=1\text{ms}$ Sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$     | 325            | 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 (指定のない場合は  $T_c = 25^\circ\text{C}$  / unless otherwise specified)

|                              |               |  |                     |                           |
|------------------------------|---------------|--|---------------------|---------------------------|
| 順電圧<br>Forward Voltage       | $V_F$         | $I_F = 4\text{A}$ ,<br>パルス測定, 一素子当りの規格値<br>Pulse measurement, Per diode  | TYP 0.4<br>MAX 0.45 | V                         |
| 逆電流<br>Reverse Current       | $I_R$         | $V_R = 30\text{V}$ ,<br>パルス測定, 一素子当りの規格値<br>Pulse measurement, Per diode | MAX 5               | mA                        |
| 接合容量<br>Junction Capacitance | $C_j$         | $f = 1\text{MHz}$ , $V_R = 10\text{V}$<br>一素子当りの規格値<br>Per diode         | TYP 310             | pF                        |
| 熱抵抗<br>Thermal Resistance    | $\theta_{jc}$ | 接合部・ケース間<br>Junction to case   | MAX 3               | $^\circ\text{C}/\text{W}$ |

■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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