

SG20TC10M

100V 20A

## 特長

- $T_j=175^\circ\text{C}$
- フルモールド
- 低  $I_R=30\mu\text{A}$
- 熱暴走を起こしにくい
- 絶縁耐圧 2kV 保証

## Feature

- $T_j=175^\circ\text{C}$
- Full Molded
- Low  $I_R=30\mu\text{A}$
- Resistance for thermal run-away
- Dielectric Strength 2kV

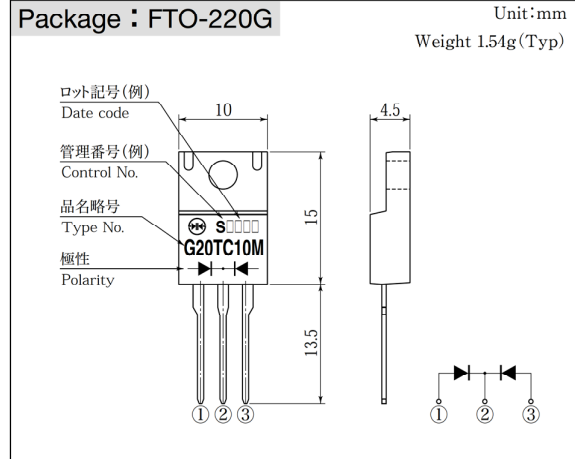
## 用途

- ノートPC、LCD モニタ等アダプタの2次側整流
- 各種電源の2次側整流
- DC/DCコンバータ
- 冗長化電源の逆流防止

## Main Use

- Secondary rectification for Adapter of Note-PC, LCD monitor, etc.
- Secondary Rectification
- DC/DC Converter
- Reverse current protection

## ■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

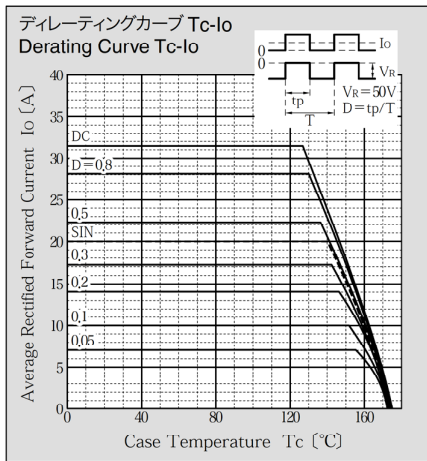
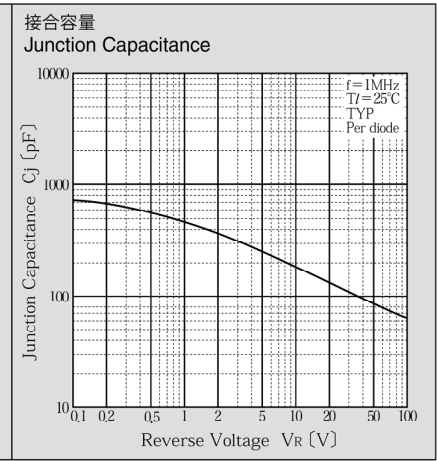
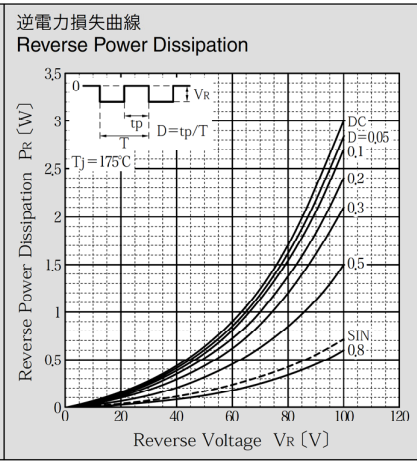
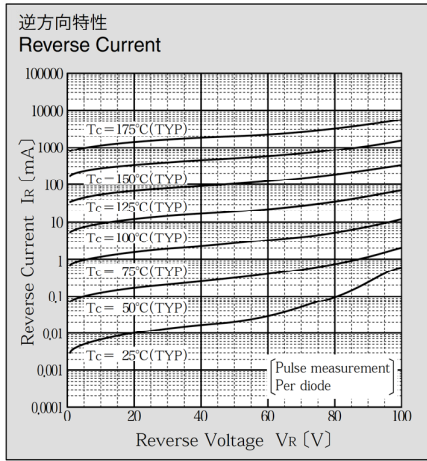
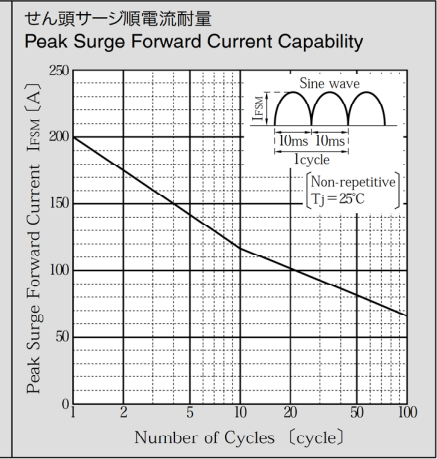
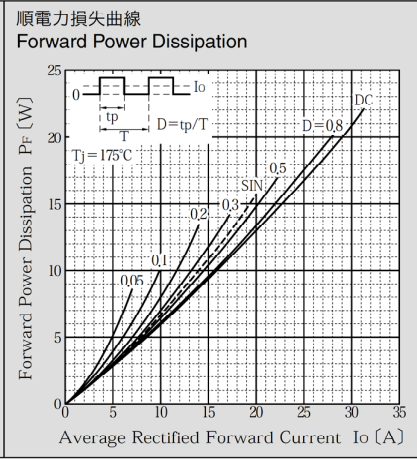
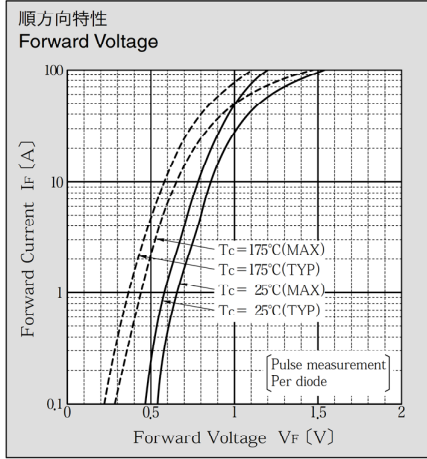
●絶対最大定格 Absolute Maximum Ratings (指定のない場合  $T_c = 25^\circ\text{C}$ /unless otherwise specified)

項目 Item	記号 Symbol	条件 Conditions	品名 Type No.	SG20TC10M	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	$V_{RM}$			100	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 $I_o/2$ , $T_c = 140^\circ\text{C}$ 50Hz sine wave, Resistance load, Per diode $I_o/2$ , $T_c = 140^\circ\text{C}$		20	A
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, $T_j = 25^\circ\text{C}$		200	A
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 Forward Voltage	$V_F$	$I_F = 10\text{A}$ , パルス測定, 1素子当りの規格値 Pulse measurement, Per diode	MAX 0.86 TYP 0.79	V
逆電流 Reverse Current	$I_R$	$V_R = 100\text{V}$ , パルス測定, 1素子当りの規格値 Pulse measurement, Per diode	MAX 30	$\mu\text{A}$
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 185	pF
熱抵抗 Thermal Resistance	$\theta_{jc}$	接合部・ケース間 Junction to case	MAX 2.2	$^\circ\text{C}/\text{W}$

■特性図 CHARACTERISTIC DIAGRAMS



\* Sine waveは50Hzで測定しています。  
 \* 50Hz sine wave is used for measurements.  
 \* 半導体製品の特性は一般的にバラツキを持っています。  
 Typical is統計的な実力を表しています。  
 \* Semiconductor products generally have characteristic variation.  
 Typical is a statistical average of the device's ability.