

## DF30SC4M

40V 30A

### 特長

- SMD
- PRRSM アバランシエ保証
- 小型大電流容量

### Feature

- SMD
- PRRSM Rating
- High Io Rating・Small-PKG

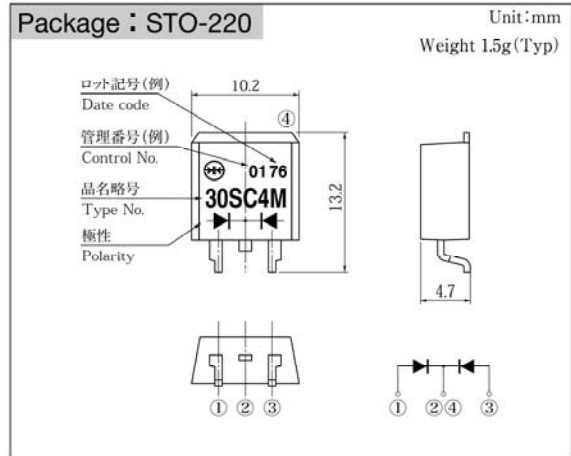
### 用途

- スイッチング電源
- DC/DC コンバータ
- 家電、ゲーム、OA 機器
- 通信、ポータブル機器

### Main Use

- Switching Regulator
- DC/DC Converter
- Home Appliance, Game, Office Automation
- Communication, Portable set

### ■外観図 OUTLINE



外形図については新電元Webサイト又は〈半導体製品一覧表〉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 or Semiconductor Short Form Catalog. As for the marking, refer to the specification "Marking, Terminal Connection".

### ■定格表 RATINGS

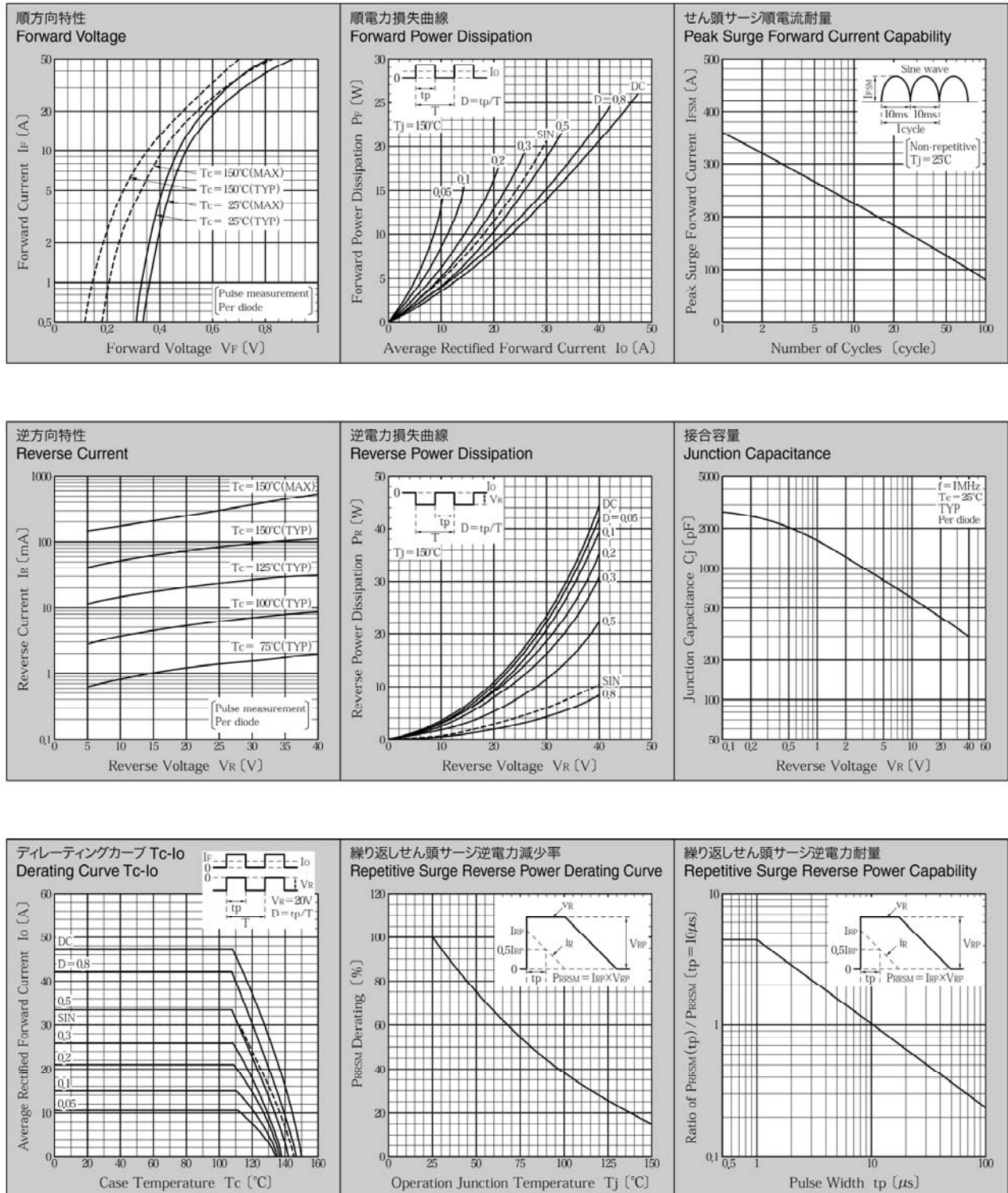
#### ●絶対最大定格 Absolute Maximum Ratings (指定のない場合 $T_c = 25^\circ\text{C}$ )

項目 Item	記号 Symbol	条件 Conditions	品名 Type No.	DF30SC4M	単位 Unit
保存温度 Storage Temperature	$T_{stg}$			-40~150	$^\circ\text{C}$
接合部温度 Operation Junction Temperature	$T_j$			150	$^\circ\text{C}$
せん頭逆電圧 Maximum Reverse Voltage	$V_{RM}$			40	V
繰り返しせん頭サージ逆電圧 Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	パルス幅0.5ms, duty 1/40 Pulse width 0.5ms, duty 1/40		45	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 $I_o/2$ , $T_c = 112^\circ\text{C}$		30	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, $T_j = 25^\circ\text{C}$		360	A
繰り返しせん頭サージ逆電力 Repetitive Peak Surge Reverse Power	$P_{RRSM}$	パルス幅10 $\mu\text{s}$ , 1素子当り, $T_j = 25^\circ\text{C}$ Pulse width 10 $\mu\text{s}$ , Per diode, $T_j = 25^\circ\text{C}$		1000	W

#### ●電氣的・熱的特性 Electrical Characteristics (指定のない場合 $T_c = 25^\circ\text{C}$ )

順電圧 Forward Voltage	$V_F$	$I_F = 15\text{A}$ , パルス測定, 1素子当りの規格値 Pulse measurement, Per diode	MAX 0.55	V
逆電流 Reverse Current	$I_R$	$V_R = V_{RM}$ , パルス測定, 1素子当りの規格値 Pulse measurement, Per diode	MAX 10	mA
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 590	pF
熱抵抗 Thermal Resistance	$\theta_{jc}$	接合部・ケース間 Junction to case	MAX 1.6	$^\circ\text{C}/\text{W}$

■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 a statistical average of the device's ability.  
 \* Semiconductor products generally have characteristic variation.  
 Typical is a statistical average of the device's ability.

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