

**D180SC6M****60V 180A****特長**

- 大容量モジュール
- 低  $V_F$
- $\theta_{jc}$  が小さい

**Feature**

- High  $I_o$  Rating・Module-PKG
- Low  $V_F$
- Small  $\theta_{jc}$

**用途**

- 大型スイッチング電源
- DC/DC コンバータ
- 大型コンピュータ
- IC テスタ

**Main Use**

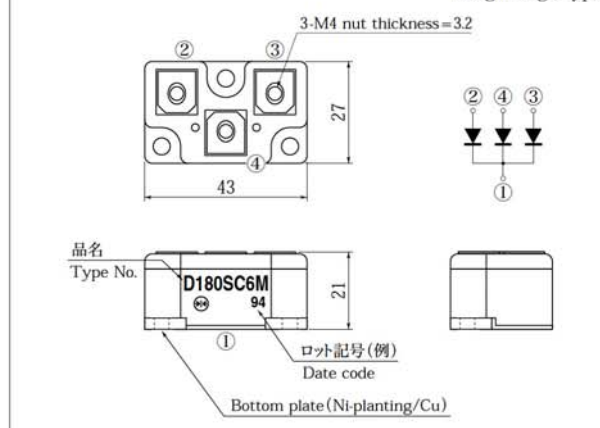
- High Power Switching Regulator
- DC/DC Converter
- Main Frame
- IC Tester

**■外観図 OUTLINE**

Package : Module

Unit:mm

Weight 62g (Typ)



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ください。

For details of the outline dimensions, refer to our web site. As for the marking, refer to the specification "Marking, Terminal Connection".

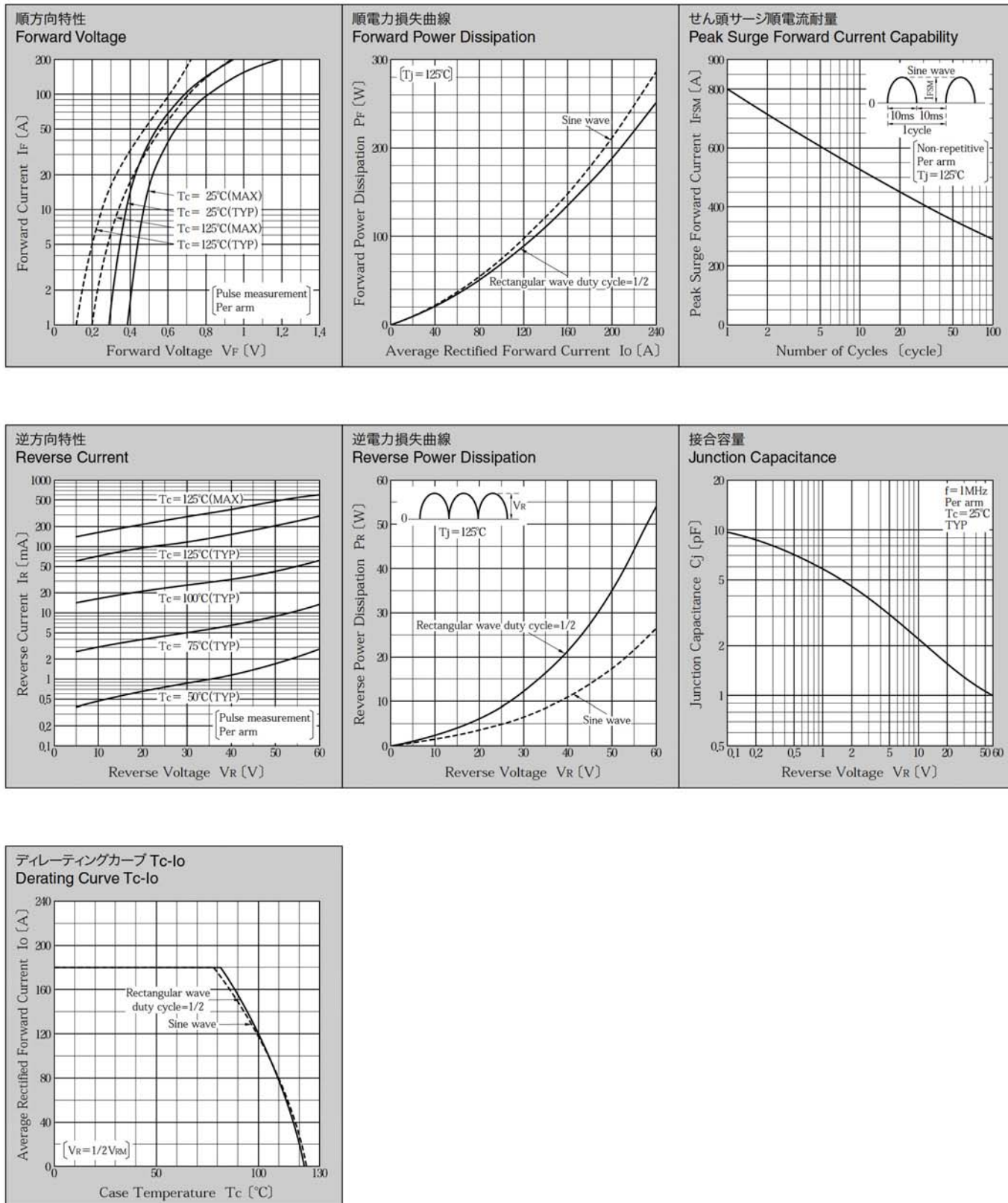
**■定格表 RATINGS****●絶対最大定格 Absolute Maximum Ratings** (指定のない場合  $T_c = 25^\circ\text{C}$ )

| 項目<br>Item                                             | 記号<br>Symbol | 条件<br>Conditions                                                                                                                                                              | 品名<br>Type No. | D180SC6M | 単位<br>Unit       |
|--------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------|------------------|
| 保存温度<br>Storage Temperature                            | $T_{stg}$    |                                                                                                                                                                               |                | -40~125  | $^\circ\text{C}$ |
| 接合部温度<br>Operation Junction Temperature                | $T_j$        |                                                                                                                                                                               |                | 125      | $^\circ\text{C}$ |
| せん頭逆電圧<br>Maximum Reverse Voltage                      | $V_{RM}$     |                                                                                                                                                                               |                | 60       | 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100ns, duty 1/100<br>Pulse width 100ns, duty 1/100                                                                                                                        |                | 65       | V                |
| 出力電流<br>Average Rectified Forward Current              | $I_o$        | 50Hz 正弦波, 抵抗負荷, フィン付き,<br>1素子当りの出力電流平均値 $I_o/3$ , $T_c = 78^\circ\text{C}$<br>50Hz sine wave, Resistance load, With heatsink,<br>Per diode $I_o/3$ , $T_c = 78^\circ\text{C}$ |                | 180      | 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,<br>1素子当りの規格値, $T_j = 125^\circ\text{C}$<br>50Hz sine wave, Non-repetitive 1 cycle peak value,<br>Per diode, $T_j = 125^\circ\text{C}$               |                | 800      | A                |
| 締め付けトルク<br>Mounting Torque                             | TOR          |                                                                                                                                                                               |                | 1.7      | N·m              |

**●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<br>Forward Voltage       | $V_F$         | $I_F = 60\text{ A}$ , パルス測定, 1素子当りの規格値<br>Pulse measurement, Per diode | MAX 0.67 | V                  |
| 逆電流<br>Reverse Current       | $I_R$         | $V_R = V_{RM}$ , パルス測定, 1素子当りの規格値<br>Pulse measurement, Per diode      | MAX 40   | mA                 |
| 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 2.2  | nF                 |
| 熱抵抗<br>Thermal Resistance    | $\theta_{jc}$ | 接合部・ケース間<br>Junction to case                                           | MAX 0.25 | $^\circ\text{C/W}$ |

## ■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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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]  
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**[Specific applications]**

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