

DE10P3

30V 10A

## 特長

- SMD
- 超低  $V_F=0.4V$
- 小型大電流容量

## Feature

- SMD
- Ultra-Low  $V_F=0.4V$
- High  $I_o$  Rating・Small-PKG

## 用途

- バッテリー逆接防止
- DC出力OR用
- DC/DCコンバータ
- 携帯電話、パソコン

## Main Use

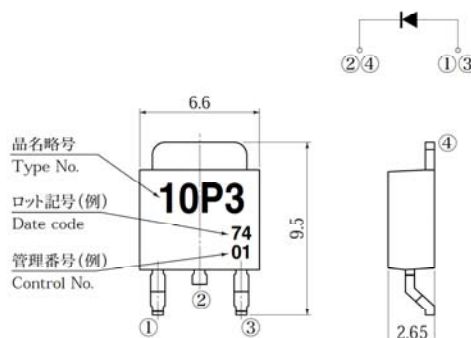
- Reverse connect protection for DC power source
- DC OR-output
- DC/DC Converter
- Mobile phone, PC

## ■外観図 OUTLINE

Package : E-pack

Unit:mm

Weight 0.326g (Typ)



外形図については新電元Webサイト又は〈ダイオードカタログ・技術資料編〉を参照下さい。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 the diode technical data book. As for the marking, refer to the specification "Marking, Terminal Connection".

## ■定格表 RATINGS

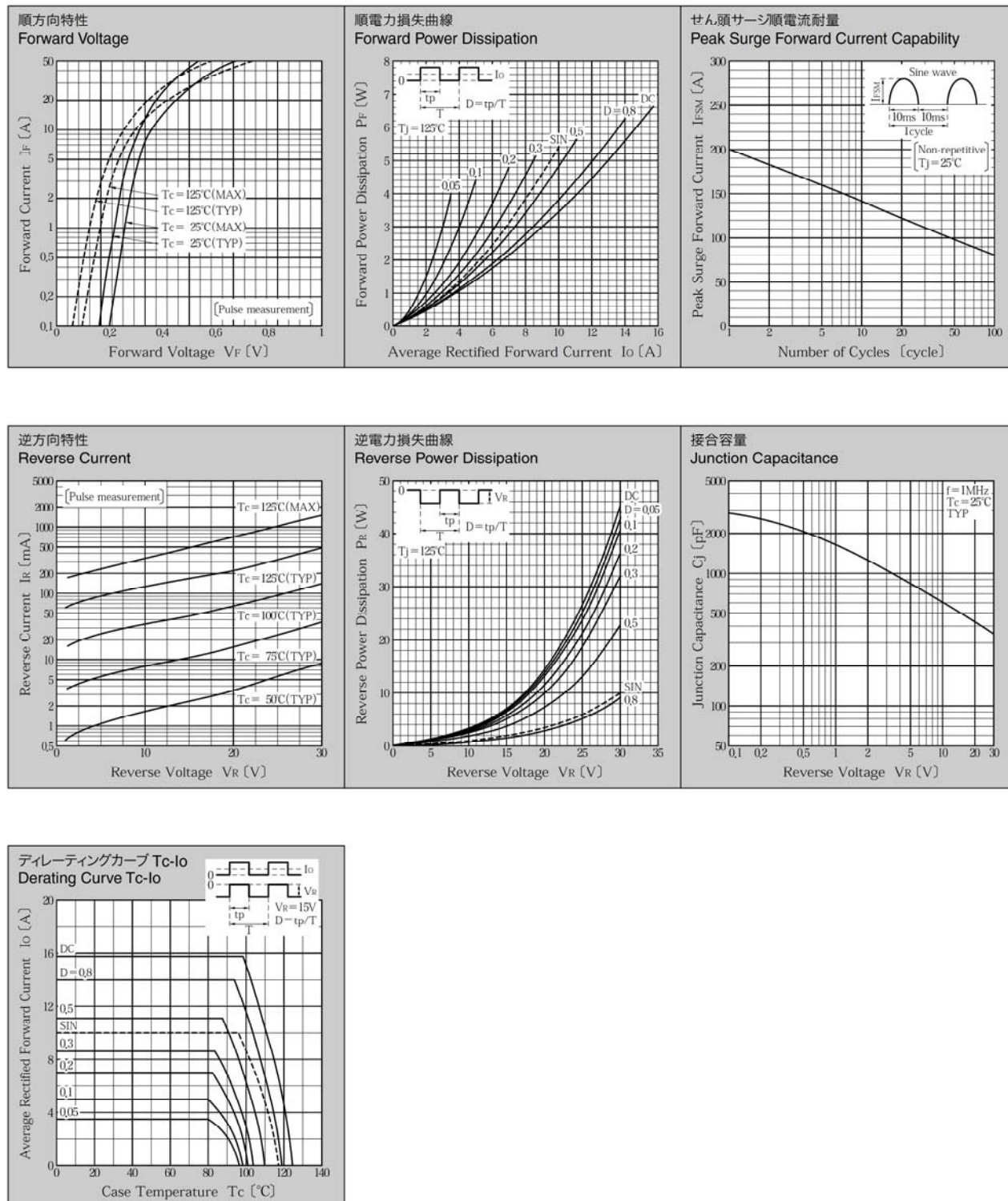
●絶対最大定格 Absolute Maximum Ratings (指定のない場合  $T_c = 25^\circ C$ )

| 項目<br>Item                                             | 記号<br>Symbol | 条件<br>Conditions                                                                                                     | 品名<br>Type No. | DE10P3  | 単位<br>Unit |
|--------------------------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------|----------------|---------|------------|
| 保存温度<br>Storage Temperature                            | $T_{stg}$    |                                                                                                                      |                | -55~125 | $^\circ C$ |
| 接合部温度<br>Operation Junction Temperature                | $T_j$        |                                                                                                                      |                | 125     | $^\circ C$ |
| 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, $T_c = 95^\circ C$<br>50Hz sine wave, Resistance load, $T_c = 95^\circ C$                             |                | 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, $T_j = 25^\circ C$<br>50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j = 25^\circ C$ |                | 200     | A          |

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

|                              |               |                                             |          |              |
|------------------------------|---------------|---------------------------------------------|----------|--------------|
| 順電圧<br>Forward Voltage       | $V_F$         | $I_F = 8A$ , パルス測定<br>Pulse measurement     | MAX 0.40 | V            |
| 逆電流<br>Reverse Current       | $I_R$         | $V_R = V_{RM}$ , パルス測定<br>Pulse measurement | MAX 25   | mA           |
| 接合容量<br>Junction Capacitance | $C_j$         | $f = 1MHz$ , $V_R = 10V$                    | TYP 600  | pF           |
| 熱抵抗<br>Thermal Resistance    | $\theta_{jc}$ | 接合部・ケース間<br>Junction to case                | MAX 4.0  | $^\circ C/W$ |

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