# Schottky Barrier Diode

# DE10SC4

## 40V 10A

### 特 長

#### SMD

- PRRSMアバランシェ保証PRRSM Rating
- 小型大電流容量
- Feature SMD
- High Io Rating · Small-PKG

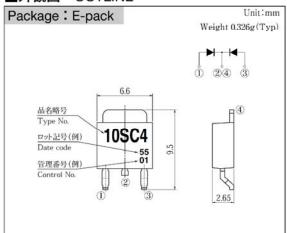
### 用途

- 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、ボータブル機器

# MainUse

- 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

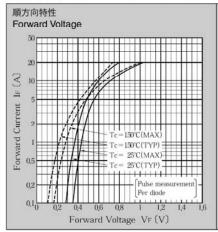
## ●絶対最大定格 Absolute Maximum Ratings (指定のない場合 Tc = 25℃)

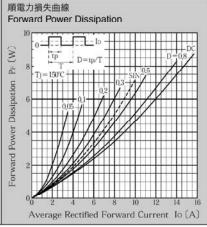
項 目 Item	記号 Symbol	条件 品名 Type No.	DE10SC4	単位 Unit
保存温度 Storage Temperature	Tstg		-55~150	C
接合部温度 Operation Junction Temperature	Tj		150	°C
せん頭逆電圧 Maximum Reverse Voltage	$V_{\rm RM}$		40	V
繰り返しせん頭サージ逆電圧 Repetitive Peak Surge Reverse Voltage	V <sub>RRSM</sub>	パルス幅0,5ms, duty 1/40 Pulse width 0.5ms, duty 1/40	45	V
川力電流 Average Rectified Forward Current	Io	50Hz正弦波, 抵抗負荷, 1素子当りの旧力電流平均值Io/2, Tc=132℃ 50Hz sine wave, Resistance load, Per diode lo/2, Tc=132℃	10	A
せん頭サージ順電流 Peak Surge Forward Current	I <sub>FSM</sub>	50Hz正弦波, 非繰り返し1サイクルせん頭値, Tj=25℃ 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25℃	100	A
繰り返しせん頭サージ逆電力 Repetitive Peak Surge Reverse Power	Prrsm	パルス幅10μs, 1素子当り, Tj=25℃ Pulse width 10μs, Per diode, Tj-25℃	330	W

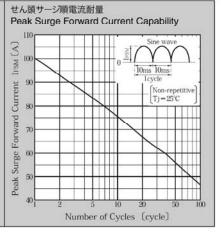
## ●電気的・熱的特性 Electrical Characteristics (指定のない場合 Tc = 25℃)

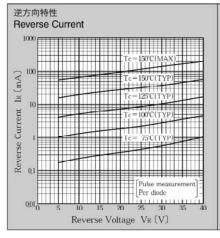
順定压 Forward Voltage	VF	I <sub>F</sub> = 5A, パルス測定、1素子当りの規格値 Pulse measurement, Per diode	MAX 0.55	V
逆電流 Reverse Current	$I_R$	$V_R = V_{RM}$ , パルス測定、1素子当りの規格値 Pulse measurement, Per diode	MAX 3.5	mA
接合容量 Junction Capacitance	Cj	f=1MHz, V <sub>R</sub> =10V, 1素子当りの規格値 Per diode	TYP 210	pF
熱抵抗 Thermal Resistance	$\theta$ jc	接合部・ケース間 Junction to case	MAX 4	°C/W

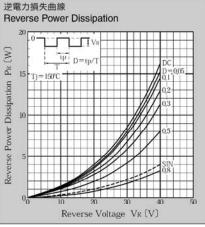
#### CHARACTERISTIC DIAGRAMS ■特性図

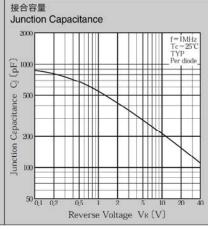


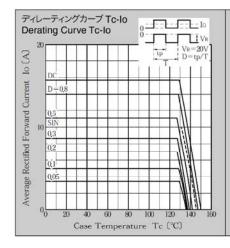


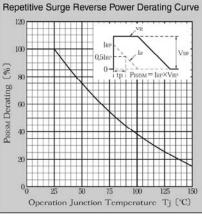




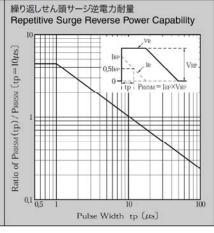








繰り返しせん頭サージ逆電力減少率



<sup>\*</sup> 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おります。
Typical は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.

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## Shindengen:

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