

DF30JC10**100V 30A****特長**

- SMD
- 低 $I_R=1.0\text{mA}$
- 熱暴走を起こしにくい
- 小型大電流容量

Feature

- SMD
- Low $I_R=1.0\text{mA}$
- Resistance for thermal run-away
- High I_o Rating・Small-PKG

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

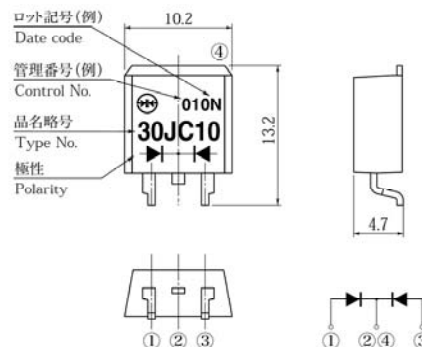
- Secondary rectification for Adapter of Note-PC, LCD Monitor, etc.
- Secondary Rectification
- DC/DC Converter
- Reverse current protection

■外観図 OUTLINE

Package : STO-220

Unit:mm

Weight 1.5g (Typ)



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.	DF30JC10	単位 Unit
保存温度 Storage Temperature	T_{stg}			-55~150	$^\circ\text{C}$
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}			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 $I_o/2$, $T_c = 116^\circ\text{C}$ 50Hz sine wave, Resistance load, Per diode $I_o/2$, $T_c = 116^\circ\text{C}$		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, $T_j = 25^\circ\text{C}$		300	A

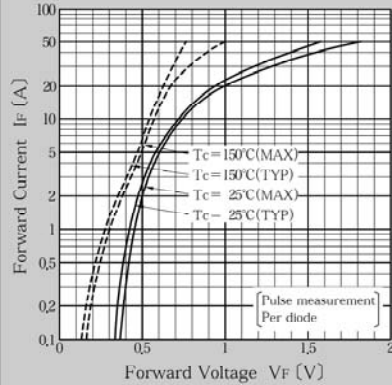
●電氣的・熱的特性 Electrical Characteristics (指定のない場合 $T_c = 25^\circ\text{C}$)

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 0.86	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 1.0	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 390	pF
熱抵抗 Thermal Resistance	θ_{jc}	接合部・ケース間 Junction to case	MAX 1.3	$^\circ\text{C/W}$

■特性図 CHARACTERISTIC DIAGRAMS

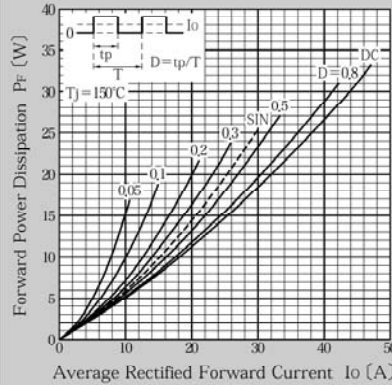
順方向特性

Forward Voltage



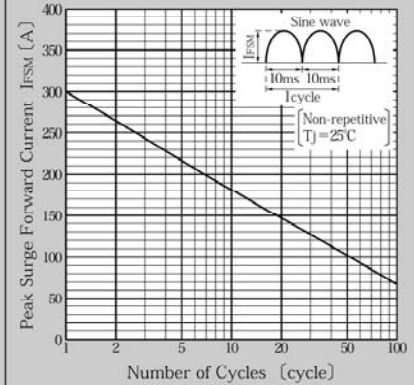
順電力損失曲線

Forward Power Dissipation



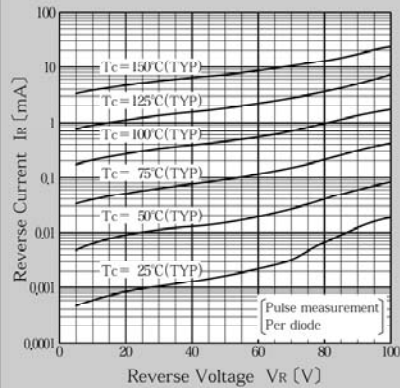
せん頭サージ順電流耐量

Peak Surge Forward Current Capability



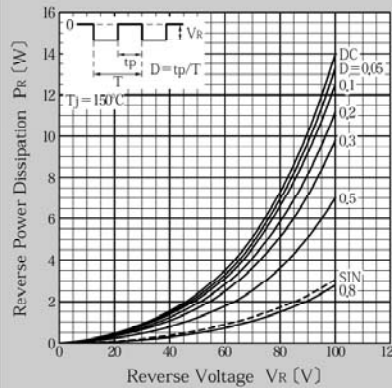
逆方向特性

Reverse Current



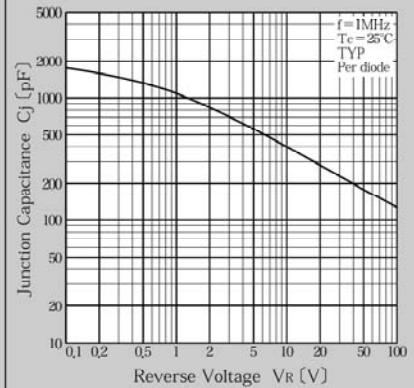
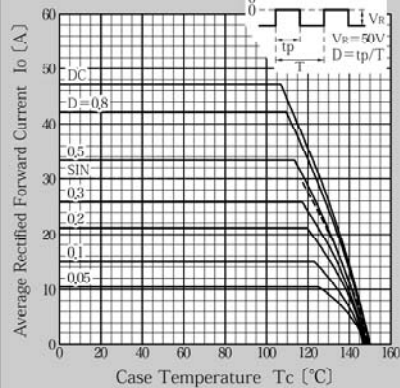
逆電力損失曲線

Reverse Power Dissipation



接合容量

Junction Capacitance

ディレーティングカーブ T_c - I_o Derating Curve T_c - I_o 

- * 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.