

**Green Products** 

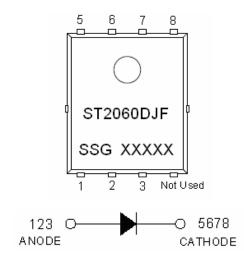
## ST2060DJF POWER SCHOTTKY RECTIFIER

### **Applications:**

- Switching power supply
- Converters
- Free-Wheeling diodes
- Reverse battery protection

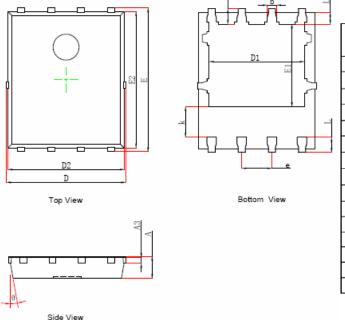
#### Features:

- Ultralow forward voltage drop
- Very small conduction losses
- Negligible switching losses
- · Extremely fast switching
- Low thermal resistance
- Avalanche capability specified
- Thin package: 1 mm
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



Dimonologo In Inches

## Mechanical Dimensions: In mm/Inches



Symbol	Dimensions i	n Millimeters	Dimensions in inches		
	Min.	Max.	Min.	Max.	
Α	0.900	1.000	0.035	0.039	
A3	0.254REF.		0.010REF.		
О	4.944	5.096	0.195	0.201	
Ш	5.974	6.126	0.235	0.241	
D1	3.910	4.110	0.154	0.162	
E1	3.375	3.575	0.133	0.141	
D2	4.824	4.976	0.190	0.196	
E2	5.674	5.826	0.223	0.229	
k	1.190	1.390	0.047	0.055	
Ð	0.350	0.450	0.014	0.018	
е	1.270TYP.		0.050TYP.		
L	0.559	0.711	0.022	0.028	
L1	0.424	0.576	0.017	0.023	
I	0.574	0.726	0.023	0.029	
θ	10°	12°	10°	12°	

Dimonolone In Millimotore

#### PDFNWB5×6-8L

<sup>•</sup> Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •



**Green Products** 

### **Marking Diagram:**



Cautions: Molding resin

Epoxy resin UL: 94V-0

#### Where XXXXX is YYWWL

ST = Device Type

20 = Forward Current (20A) 60 = Reverse Voltage (60V)

DJF = Package type

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

## **Ordering Information:**

Device	Package	Shipping
ST2060DJF	PDFNWB5×6-8L (Pb-Free)	3000 pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

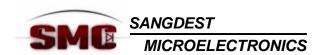
## **Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	VRWM	-	60	V
Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle @T <sub>C</sub> = 80°C, rectangular wave form	20	А
Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine pulse	150	А

<sup>•</sup> Weiqi Street, Airport Development Zone, Jiangning District, Nanjing, China 211113 🗏 (86) 25-87123907 •

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •





Green Products

### **Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	$V_{F1}$	@ 20A, Pulse, T <sub>J</sub> = 25 °C	0.75	V
	$V_{F2}$	@ 20A, Pulse, T <sub>J</sub> = 125 °C	0.70	V
Reverse Current *	I <sub>R1</sub>	$@V_R = \text{rated } V_R$	1	mA
		T <sub>J</sub> = 25 °C		
	I <sub>R2</sub>	$@V_R = rated V_R$	40	mA
		T <sub>J</sub> = 125 °C		
Voltage Rate of Change	dv/dt	-	10,000	V/μs

<sup>\*</sup> Pulse Width < 300µs, Duty Cycle <2%

# **Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Junction Temperature	TJ	-	-55 to + 150	°C
Storage Temperature	T <sub>stg</sub>	-	-55 to + 150	°C
Maximum Thermal Resistance Junction to Case	$R_{ heta JC}$	DC operation	2.6	°C/W
Approximate Weight	wt	-	0.095	g
Case Style		PDFNWB5×6-8L		





#### **Green Products**

#### DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanijing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..

<sup>•</sup> FAX (86) 25-87123900 • World Wide Web Site - http://www.sangdest.com.cn • E-Mail Address - sales@ sangdest.com.cn •