

Technical Data Data Sheet N1654, Rev. - **Green Products** 

### SDD860 STANDARD RECTIFIER

#### Features:

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

#### Mechanical data:

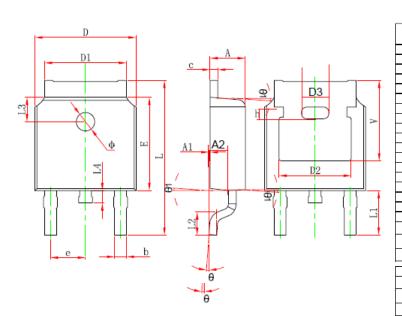
Case: Molded Plastic

• Terminals: Solder Plated, Solderable Per MIL-STD 750, Method 2026

Marking: Type Number

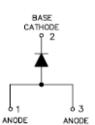
Weight: 0.39 grams(Approx)

# Mechanical Dimensions: In mm/Inches



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
Α	2.200	2.380	0.087	0.094
A10.000	0.000	0.100	0.000	0.004
b	0.710	0.810	0.028	0.032
С	0.460	0.560	0.018	0.022
D	6.500	6.700	0.256	0.264
D1	5.130	5.460	0.202	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
е	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900	REF.	0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600	REF.	0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
A2	0.910	1.110	0.036	0.044
V	5.350	REF.	0.211 REF.	
D3	1.778REF.		0.070REF.	
h	0.762REF.		0.030REF.	
<del>0</del> 1	7°		7°	
V	5.350 REF.		0.211 REF.	
D3	1.778REF.		0.070REF.	
h	0.762REF.		0.030REF.	
θ1	7°		7°	

#### **DPAK**



<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 •





Technical Data
Data Sheet N1654, Rev. -

**Green Products** 

## **Marking Diagram:**



Where XXXXX is YYWWL

 SDD860
 = Part Name

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

## **Ordering Information**

Device	Package	Shipping
SDD860	DPAK	2500pcs / reel
3DD000	(Pb-Free)	2000pcs / Teel

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

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 •





Technical Data Data Sheet N1654, Rev. - **Green Products** 

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SDD860	Unit
Maximum Peak Repetitive Reverse Voltage Maximum DC Blocking Voltage	$V_{RRM} \ V_{R}$	600	V
Maximum RMS Voltage	$V_{RMS}$	420	
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length @T <sub>C</sub> = 105°C	I(AV)	8.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80	А
Maximum Instantaneous Forward Voltage @I <sub>F</sub> = 8.0A	V <sub>F</sub>	1.1	V
Maximum DC Reverse Current At Rated DC Blocking Voltage @T <sub>A</sub> = 25°C	I <sub>R</sub>	5	uA
Maximum Thermal Resistance Junction to Case	$R_{ hetaJC}$	5	°C/W
Operating Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C
Operating Junction Temperature	T <sub>J</sub>	-55 to +150	°C
Case Style	DPAK		

<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 •



SDD860

Technical Data Data Sheet N1654, Rev. - **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 (Nanjing) 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 •