Technical Data
Data Sheet N1520, Rev. -

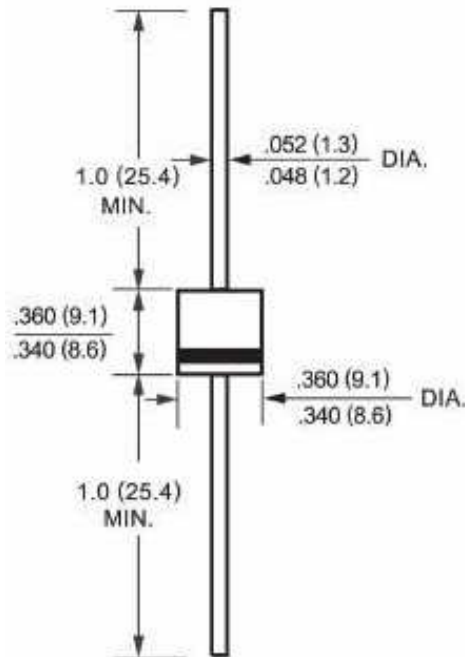*Green Products*

20SQ200 SCHOTTKY BARRIER RECTIFIER

Applications:

- **DC-DC converters**
- **AC adapter**
- **High frequency rectification circuit**
- **Bypass diodes**
- **Photovoltaic Solar cell Protection Schottky Rectifier**

Features:

- **Super-high speed & low noise switching**
- **Low voltage drop**
- **This is a Pb – Free Device**
- **All SMC parts are traceable to the wafer lot**
- **Additional testing can be offered upon request**

Mechanical Dimensions: In Inches/ mm

.052 (1.3)
‾‾‾‾‾‾‾‾ DIA.
.048 (1.2)

1.0 (25.4)
MIN.

.360 (9.1)
‾‾‾‾‾‾‾
.340 (8.6)

.360 (9.1)
‾‾‾‾‾‾‾ DIA.
.340 (8.6)

1.0 (25.4)
MIN.

R-6

Technical Data
Data Sheet N1520, Rev. -

Green Products

Marking Diagram:

Where XXXXX is YYWWL

20	= Forward Current (20A)
S	= Package Type
Q	= Device Type
200	= Reverse Voltage (200V)
SSG	= SSG
YY	= Year
WW	= Week
L	= Lot Number

Cautions：Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
20SQ200	R-6 (Pb-Free)	500pcs / reel

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

Technical Data   *Green Products*
Data Sheet N1520, Rev. -

Maximum Ratings and Electrical Characteristics @T_A=25℃ unless otherwise specified

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

Characteristic	Symbol	20SQ200	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Average Rectified Output Current (Note 1) @T_C = 135℃	$I_{F(AV)}$	20	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300	A
Forward Voltage @I_F = 20A,T_A = 25℃ @I_F = 20A,T_A = 125℃	V_{FM}	1.10 1.00	V
Peak Reverse Current @T_A = 25℃ At Rated DC Blocking Voltage @T_A = 125℃	I_{RM}	1 8	mA
Junction Capacitance (Note 2)	C_T	400	pF
Maximum Thermal Resistance, Junction to lead	$R_{\theta JL}$	8	℃ /W
Storage Temperature Range	T_J,T_{STG}	-50 to +150	℃
Case Style		R-6	

Note:1. Mount on Cu-Pad Size 5mm×5mm on P.C.B.
          2. V_R = 5V, f_{SIG} = 1MHz

SANGDEST

MICROELECTRONICS

20SQ200

Technical Data

Green Products

Data Sheet N1520, Rev. -

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..