Technical Data *Green Products*
Data Sheet N1693, Rev. -

ABS2 THRU ABS10

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

Voltage Range - 200 to 1000 Volts Current - 0.8/1.0 Ampere

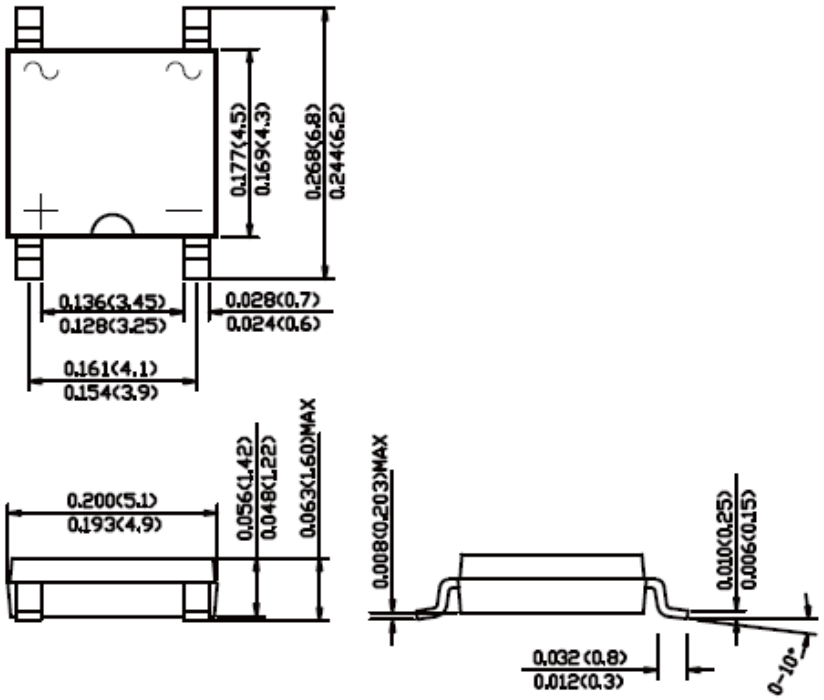
Features:

- **Ideal for printed circuit board**
- **Reliable low cost construction utilizing molded plastic technique**
- **High temperature soldering guaranteed: 260 /10 seconds at 5 lbs., (2.3kg) tension**
- **Small size, simple installation**
- **High surge current capability**
- **Glass passivated chip junction**

Mechanical Data:

- **Case: Molded plastic body**
- **Terminals: Plated leads solderable per MIL-STD-750, Method 2026**
- **Polarity: Polarity symbols marked on case**
- **Mounting Position: Any**

Mechanical Dimensions: In Inches/mm



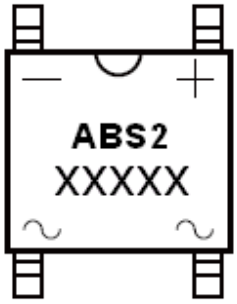
ABS

ABS2 THRU ABS10

Technical Data
Data Sheet N1693, Rev. -

Green Products

Marking Diagram:



Where XXXXX is YYWWL

ABS2 = Part Name
YY = Year
WW = Week
L = Lot Number

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

Ordering Information:

Device	Package	Shipping
ABS2 THRU ABS10	ABS (Pb-Free)	3000pcs / reel

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

ABS2
THRU
ABS10

Technical Data ***Green Products***
Data Sheet N1693, Rev. -

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

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

Characteristic	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	560	700	
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	
Maximum average forward rectified current On glass-epoxy P.C.B.(Note1) On aluminum substrate(Note2)	$I_{(AV)}$	0.8 1.0					V
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
Maximum instantaneous forward voltage drop per leg at 0.4A	V_F	0.95					V
Maximum DC reverse current T_A = 25°C at rated DC blocking voltage T_A = 100°C	I_R	5 100					μA
Typical thermal resistance (Note 3)	$R_{\theta JL}$ $R_{\theta JA}$	25 80					°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150					°C

Note: 1. On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads
2. On aluminum substrate P.C.B. with on area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad
3. Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

ABS2
THRU
ABS10

Technical Data
Data Sheet N1693, Rev. -

Green Products

FIG.1 TYPICAL FORWARD CHARACTERISTICS

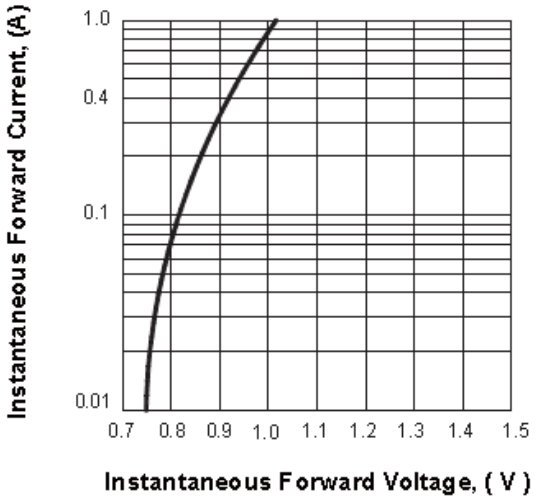


FIG.2 FORWARD DERATING CURVE

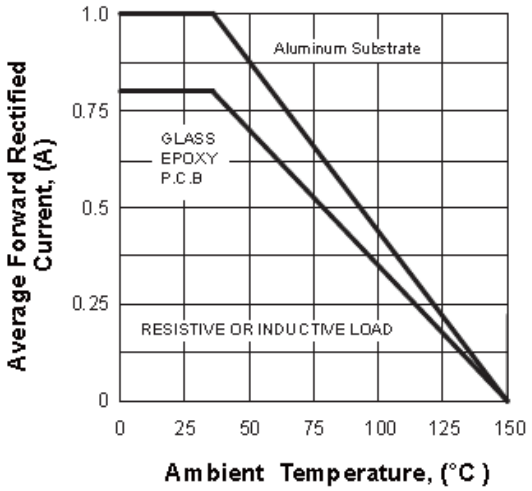


FIG.3 TYPICAL REVERSE CHARACTERISTICS

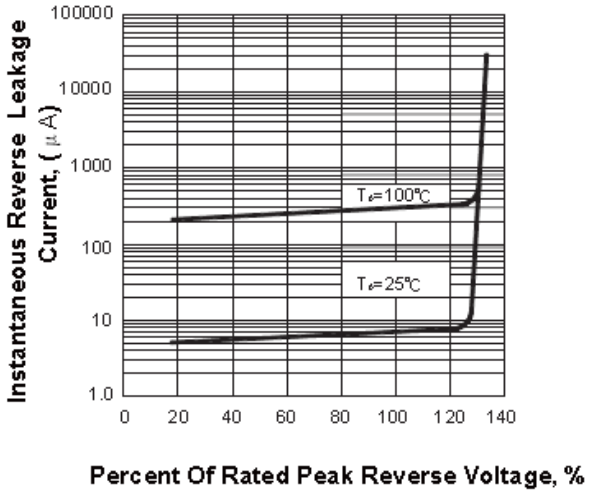
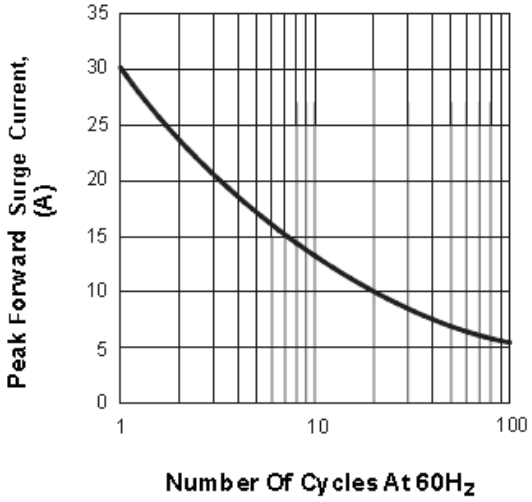


FIG.4 PEAK FORWARD SURGE CURRENT



ABS2
THRU
ABS10

Technical Data ***Green Products***

Data Sheet N1693, 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..