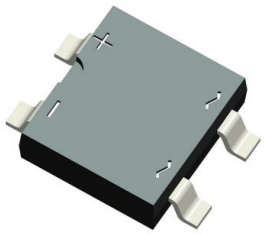
Technical Data
Data Sheet N1693, Rev. A

ABS2 THRU ABS10

SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

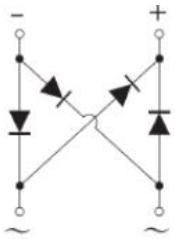


ABS

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0
- This is a Pb − Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Circuit Diagram



Mechanical Data

- Case: SOPA-4, Molded plastic ABS
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting Position: Any

Maximum Ratings@T_A=25°C unless otherwise specified

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

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	140	280	420	560	700	V
Maximum Average Rectified Output Current (Note 1)@T_A =30°C (Note 2)@T_A =30°C	$I_{(AV)}$	0.5 0.8					V
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A

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Electrical Characteristics@T_A=25°C unless otherwise specified

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Maximum Forward Voltage (per element) @I_F =0.8A	V_F	1.1					V
Maximum Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_R	5.0 500					μA

* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications@T_A=25°C unless otherwise specified

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25					°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150					°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.

Ratings and Characteristics Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

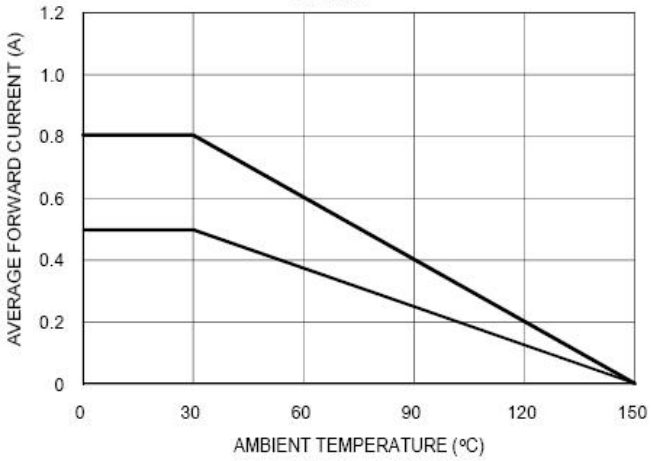

FIG. 2 TYPICAL FORWARD CHARACTERISTIC

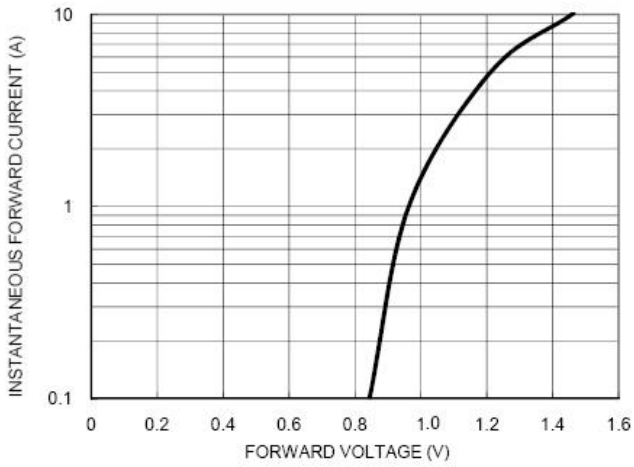

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FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

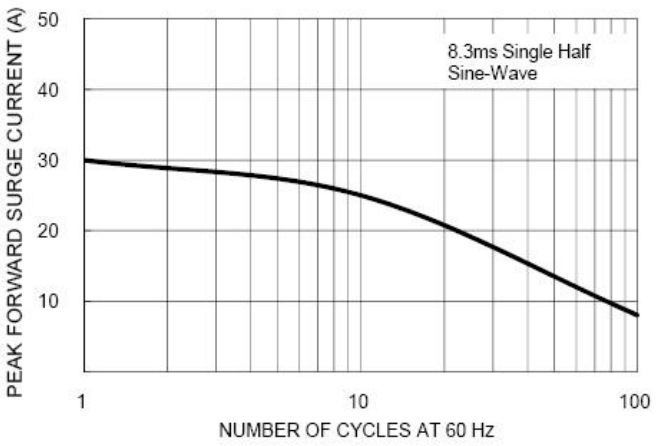
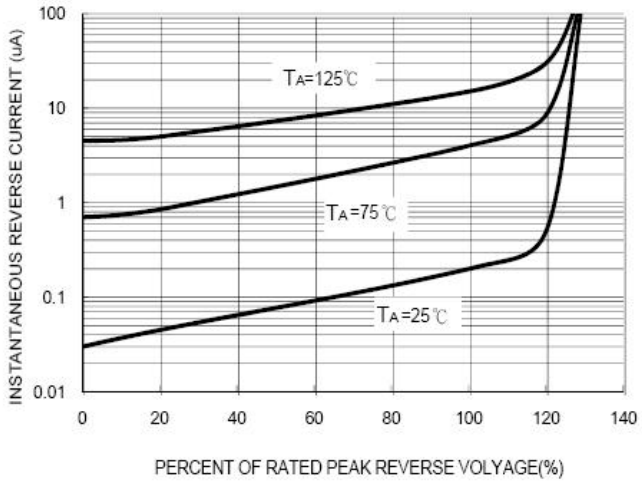
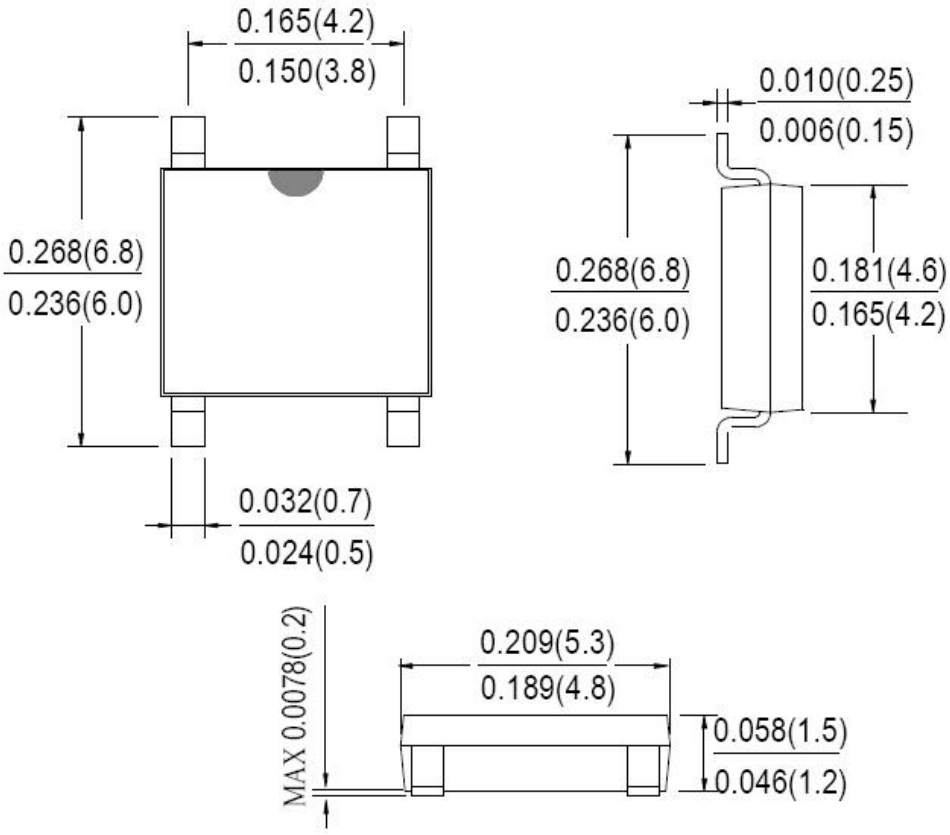


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



Mechanical Dimensions ABS(Inches/Millimeters)



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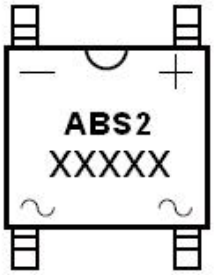
Ordering Information

Device	Package	Plating	Shipping
ABS2 THRU ABS10	ABS (Pb-Free)	Pure Sn	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

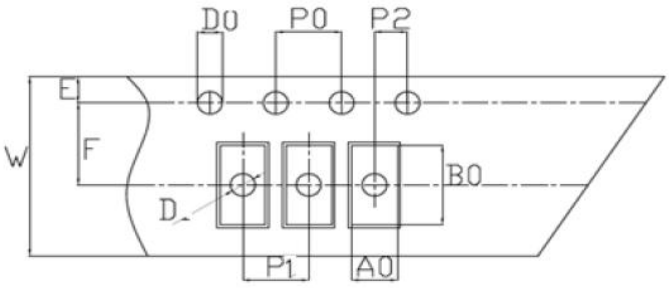


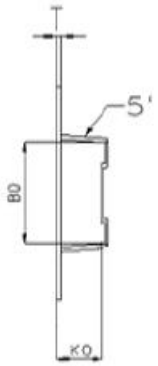
Where XXXXX is YYWWL

ABS2 = Type Number
YY = Year
WW = Week
L = Lot Number

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

Carrier Tape Specification ABS





SYMBOL	Millimeters	
	Min.	Max.
A0	5.21	5.41
B0	7.10	7.30
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	1.55	1.75
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20

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