

## ABS1 THRU ABS10

## 0.8A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

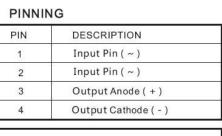
### **FEATURES:**

- Glass Passivated Chip Juntion
- Reverse Voltage 100 to 1000 V
- Forward Current 0.8 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: ABS/LBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 88mg 0.0029oz

#### **Maximum Ratings and Electrical characteristics**





Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	ABS1	ABS2	ABS4	ABS6	AB S8	ABS10	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	100	200	400	600	800	1000	v
Average Rectified Output Current at Ta = 40 °C	Io	0.8						
Peak Forward Surge Current 8.3 ms Single Ha Sine Wave Superimposed on Rated Load (JEDEC Method)	f I <sub>FSM</sub>	30						А
Forward Voltage per element @I <sub>F</sub> =0.4A @I <sub>F</sub> =0.8A	VF	1.0 1.1						
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>4</sub> =25 °C @T <sub>4</sub> =100°C @T <sub>4</sub> =125 °C	I <sub>R</sub>	5.0 100 500						μA
Typical Junction Capacitance (Note1)	Cj	13						pF
Typical Thermal Resistance(Note2)	R <sub>eja</sub> R <sub>eji</sub>	80 16						
Operating and Storage Temperature Range	Tj, T <sub>stg</sub>	-55 ~ +150						°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with  $1.3 mm^2\,copper$  pad.



Fig.1 Average Rectified Output Current **Derating Curve** Average Rectified Output Current (A) 1.2 1.0 Al. Substrate PC Board 0.8 0.6 Glass Epoxy PC Board 0.4 0.2 Resistive or Inductive Load 0.0 25 50 75 100 125 150 175 Ambient Temperature (°C)

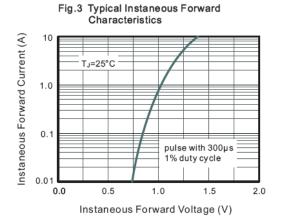
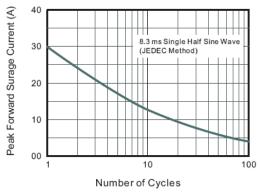


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



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Fig.2 Typical Reverse Characteristics

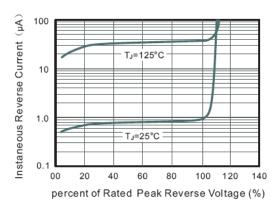
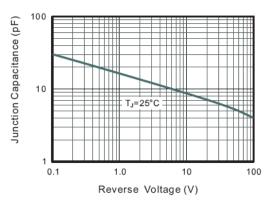


Fig.4 Typical Junction Capacitance

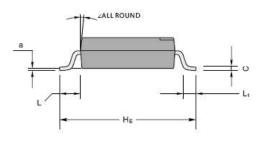


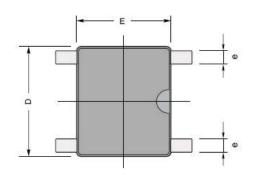


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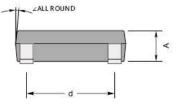
## PACKAGE OUTLINE

Plastic surface mounted package; 4 leads



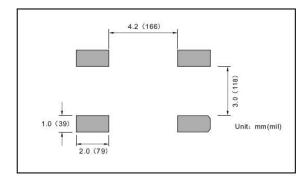


#### ABS/LBF



UNIT		А	С	D	E	H <sub>E</sub>	d	е	L	L <sub>1</sub>	а	2
mm	max	1.5	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.3	0.15	4.9	4.2	6.0	3.8	0.5	0.95	0.0		
	max	59	8.7	205	177	252	165	28	07	24	4	
mil	min	51	5.9	193	166	236	150	20	37	24	4	

The recommended mounting pad size



#### Marking

Marking code			
ABS1			
ABS2			
ABS4			
ABS6			
ABS8			
ABS10			
3Sxx			