ABS108 – ABS110

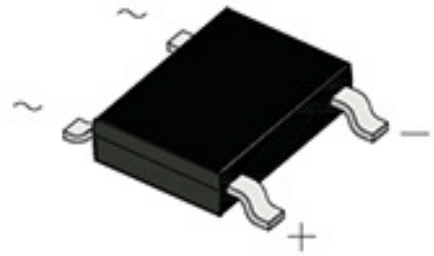
PFC Device Corporation

1A Glass Passivated Surface Mount Bridge Rectifiers

Major ratings and characteristics

Characteristics	Values	Units
Max. Avg. Forward Current (on aluminum)	1	A
V_F@ 0.4A , Ta=25 ^oC	0.95	V, Max.
T_J Operating Junction Temperature	-55 to +150	^oC

ABS108 – ABS110



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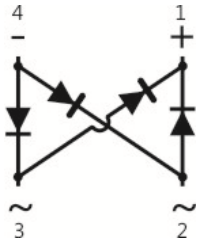


Features

- Ideal for printed circuit board
- Glass passivated junction
- High surge current capability
- Small size, simple installation
- 150^{o}C Operating Junction Temperature
- Lead Free Finish, RoHS Compliant

Typical Applications

Device ideal used on AC-to-DC bridge full wave rectification for LED lighting, mobile phone charger, home appliances, and networking in Power Supply applications

1. Characteristics

Maximum Ratings and Electrical Characteristics

Rating at 25C ambient temperature unless otherwise specified.

Single phase, half-wave, 60Hz, resistive or inductive load.

For capacitive load current derate by 20%.

Parameter		Symbol	ABS108	ABS110	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	560	700	
Maximum DC blocking Voltage		V_{RRM}	800	1000	
Maximum Average Forward Rectified Current	Aluminum Substrate	$IF_{(AV)}$	1.0		Amp
	Glass-epoxy P.C.B		0.8		
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	30		Amps
Maximum instantaneous Forward Voltage at 0.4A		V_F	0.95		Volts
Maximum DC Reverse Current at Rated DC blocking voltage	T_A=25°C	I_R	5.0		uA
	T_A=125°C		150		
Rating for fusing (t < 8.3mS)		I^2t	3.74		A^2sec
Typical Junction Capacitance Pre Leg		C_J	13		pF
Typical Thermal Resistance	Junction to Lead	$R\theta_{JL}$	25		°C / W
	On glass-epoxy P.C.B	$R\theta_{JA}$	80		
Operating Junction Temperature Range		T_J	- 55 to +150		°C
Storage Junction Temperature		T_{STG}	- 55 to +150		

2. Characteristics Curves

Ratings and Characteristics Curves (TA = 25°C unless otherwise specified)

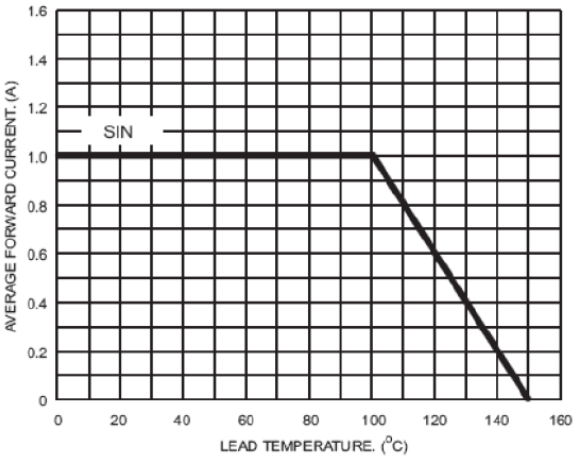


Figure 1: Current Derating, Lead

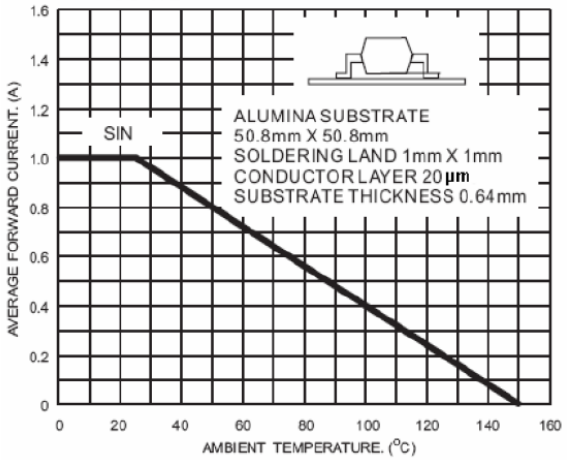


Figure 2: Current Derating, Ambient

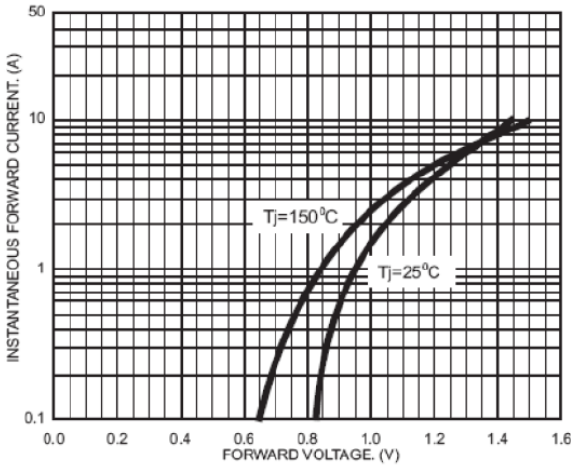


Figure 3: Typical Forward Voltage

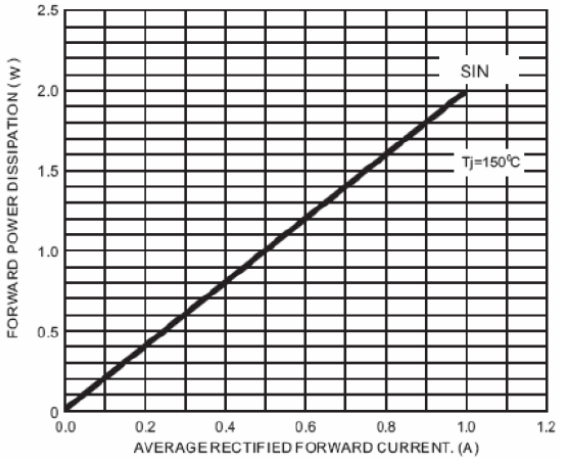


Figure 4: Average Rectified Forward Current

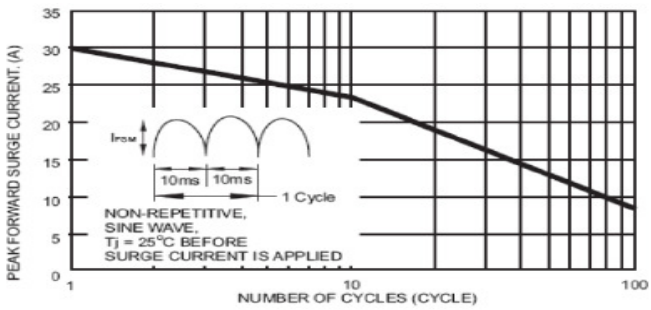
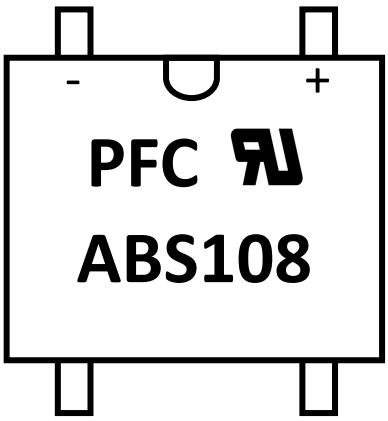


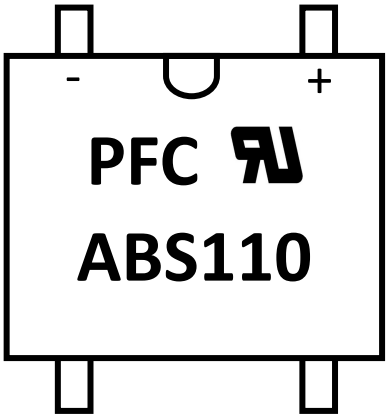
Figure 5: Max. Non-Repetitive Forward Surge Current

3. Marking information

Top Marking Rule



ABS108 = Product Type Marking Code

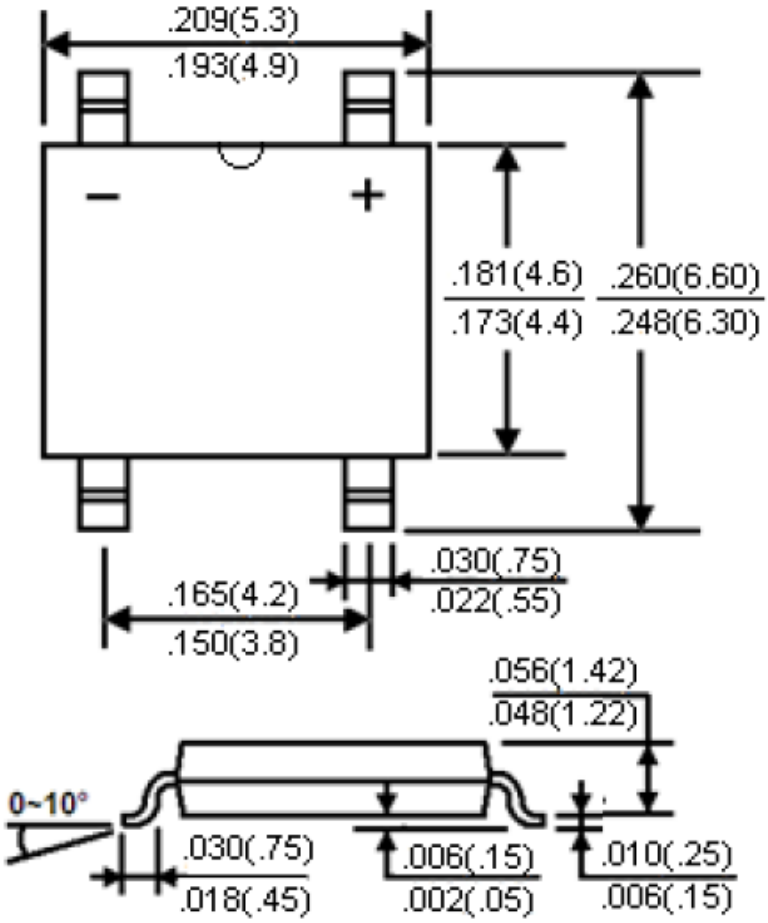


ABS110 = Product Type Marking Code

4. Package information

Package Outline Dimensions millimeters

ABS：



5. Ordering information

Part Number	Package	Delivery mode
ABS108	ABS	5000 pieces / Reel
ABS110	ABS	5000 pieces / Reel

Mechanical

- Molder Plastic: UL Flammability Classification Rating 94V-0
- Device Weight : 0.03 ounces (0.093 grams) – ABS