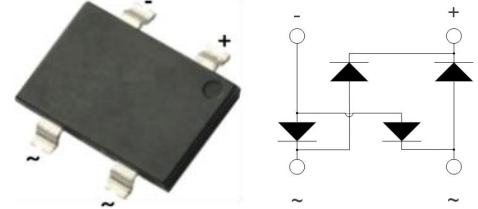


Features

- ◆ Glass Passivated Chip
- ◆ High Surge Current Capability
- ◆ Low Reverse Leakage Current
- ◆ Case to Terminal Isolation Voltage 2500V

Application

- ◆ Fast Charger
- ◆ Household Electric Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 0.38 Grams

Maximum Ratings and Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter		Rating	Unit
V_{RRM}	Recurrent Peak Reverse Voltage		1000	V
$I_{F(AV)}$	Average Forward Output Rectified Current, $T_A = 100^\circ\text{C}$		10.0	A
V_F	Forward Voltage Per Leg, $I_{FM} = 10.0\text{A}$		1.1	V
I_{FSM}	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		220	A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0	μA
		$T_A = 125^\circ\text{C}$	100	
i^2t	Rating for Fusing ($t < 8.3\text{ms}$)		200.9	A^2S
V_{isol}	Rms Isolation Voltage from Case to Leads		2500	V
$R_{\theta JA}$	Thermal Resistance Between Junction and Ambient		55	$^\circ\text{C/W}$
$R_{\theta JC}$	Thermal Resistance Between Junction and Case		3.0	$^\circ\text{C/W}$
T_J, T_{STG}	Operating Junction and Storage Temperature Range		-55 to 150	$^\circ\text{C}$

Notes:

- a. Junction to case with heatsink.
- b. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

■ Characteristic Curve

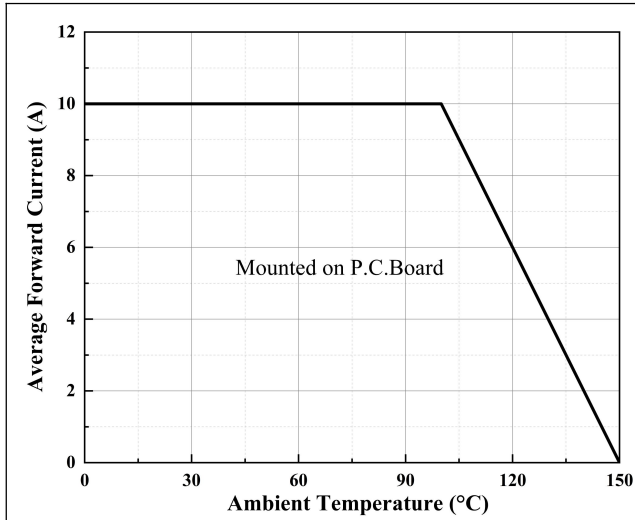


Figure 1. Forward Current Derating Curve

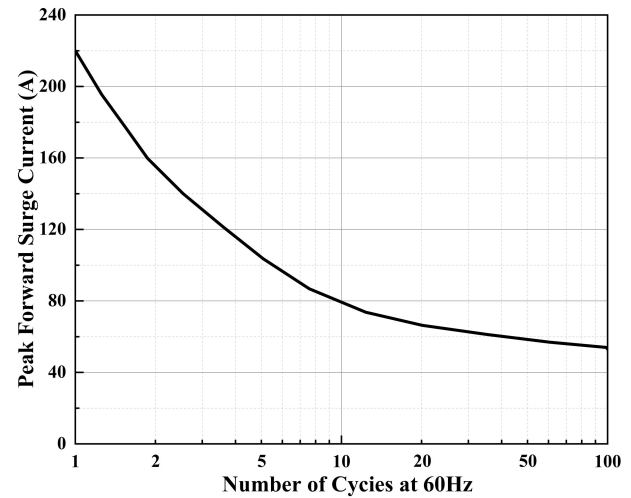


Figure 2. Maximum Non-Repetitive Surge Current

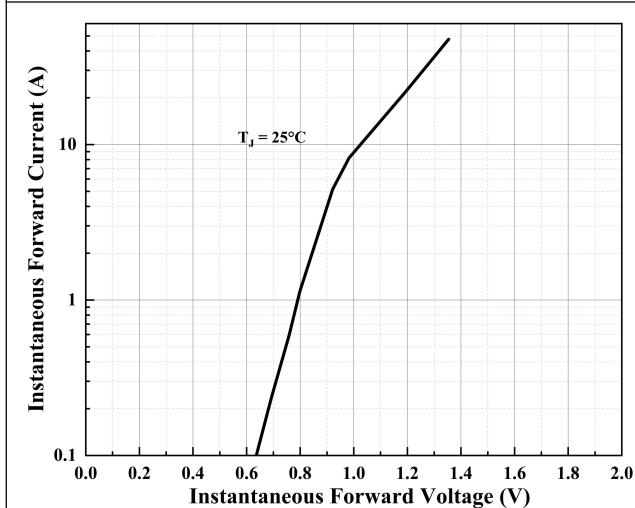


Figure 3. Typical Forward Characteristics Per Diode

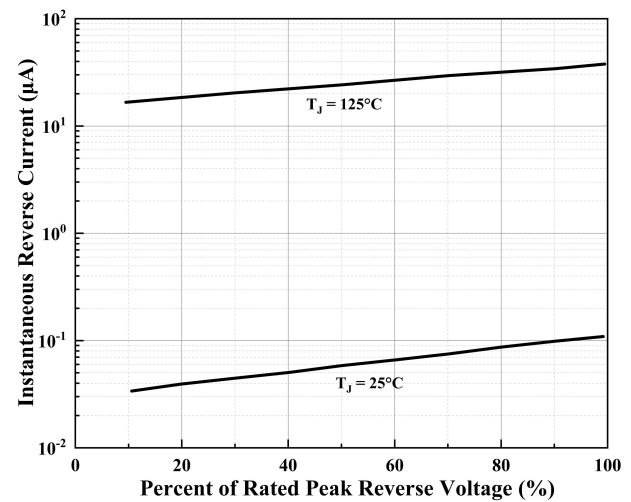
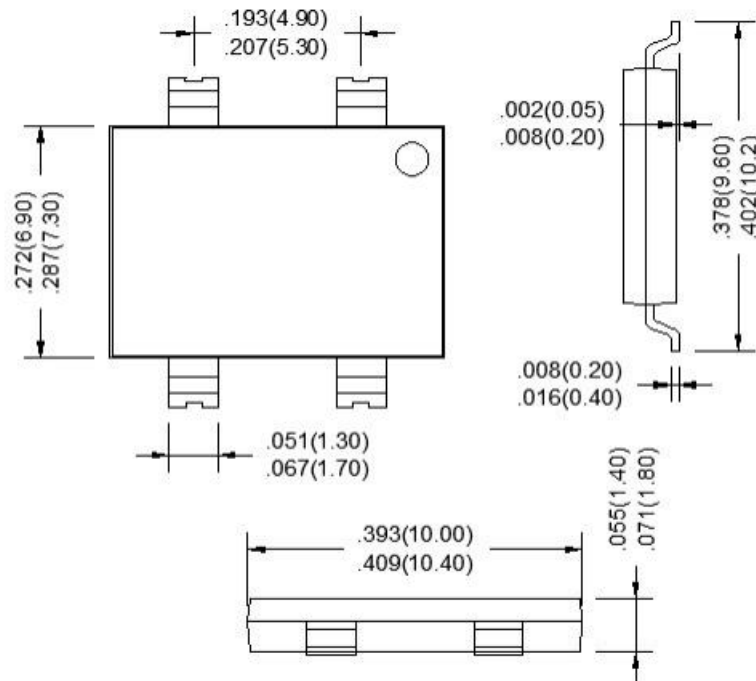


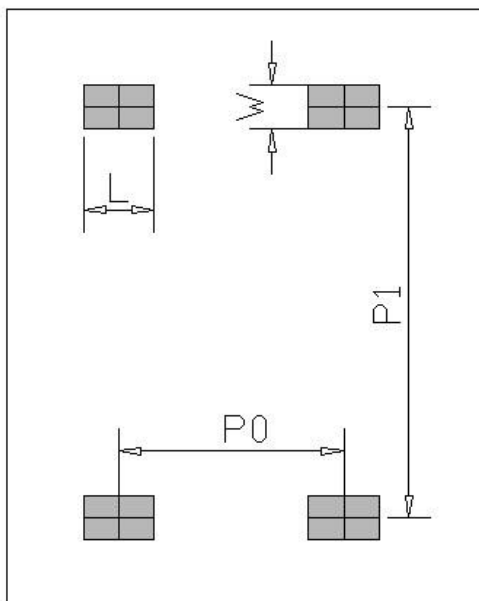
Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information



Dimensions in inches and (millimeters)

■ Suggested pad layout



Unit:mm	
DIM	MIN
P0	5.10
P1	9.30
L	1.60
W	1.00

■ Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HBS1010	Approximate 0.38	2500	5000	25000	13"Reel