



Micro Commercial Components  
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# HD01 THRU HD10

## Features

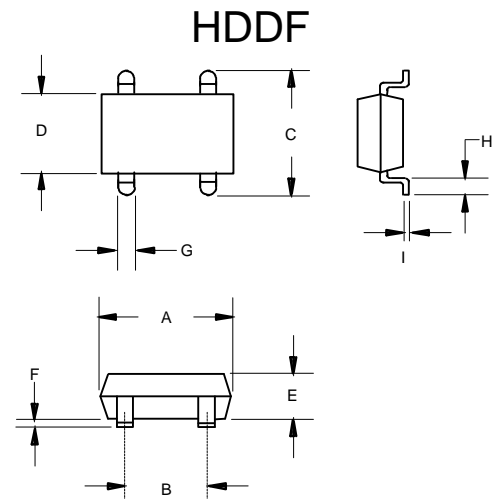
- Surface Mount Package
- Rating to 1000V PRV
- Ideal for Printed Circuit Board
- Lead tin Plated Copper

## 0.8 Amp Single Phase Glass Passivated Bridge Rectifier 100 to 1000 Volts

## Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 75°C/W Junction to ambient

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HD01	HD01	100V	70V	100V
HD02	HD02	200V	140V	200V
HD04	HD04	400V	280V	400V
HD06	HD06	600V	420V	600V
HD08	HD08	800V	560V	800V
HD10	HD10	1000V	700V	1000V



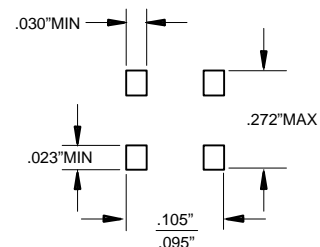
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.177	.193	4.50	4.90	
B	.091	.106	2.30	2.70	
C	---	.276	---	7.00	
D	.142	.157	3.60	4.00	
E	.091	.106	2.30	2.70	
F	---	.008	---	0.20	
G	.020	.031	0.50	0.80	
H	.028	.043	0.70	1.10	
I	.006	.014	0.15	0.35	

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	0.8 A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 0.4\text{A}; T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

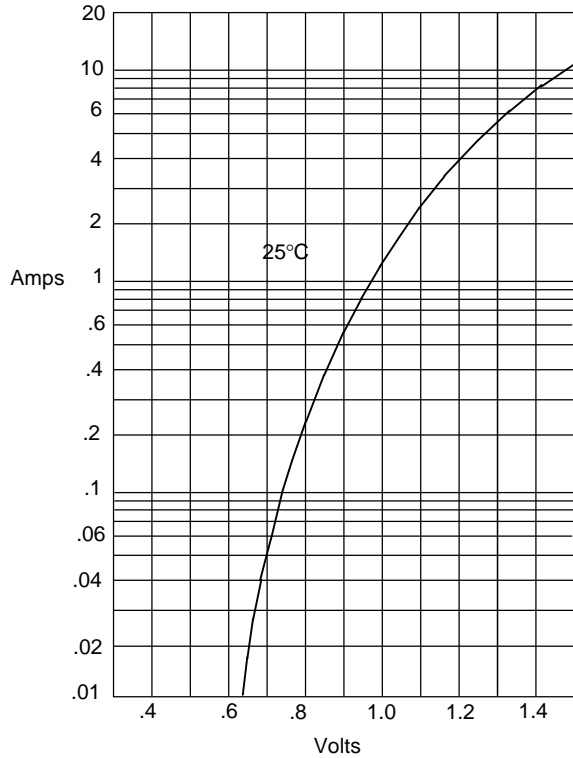
### Suggested Solder Pad Layout



# HD01 thru HD10

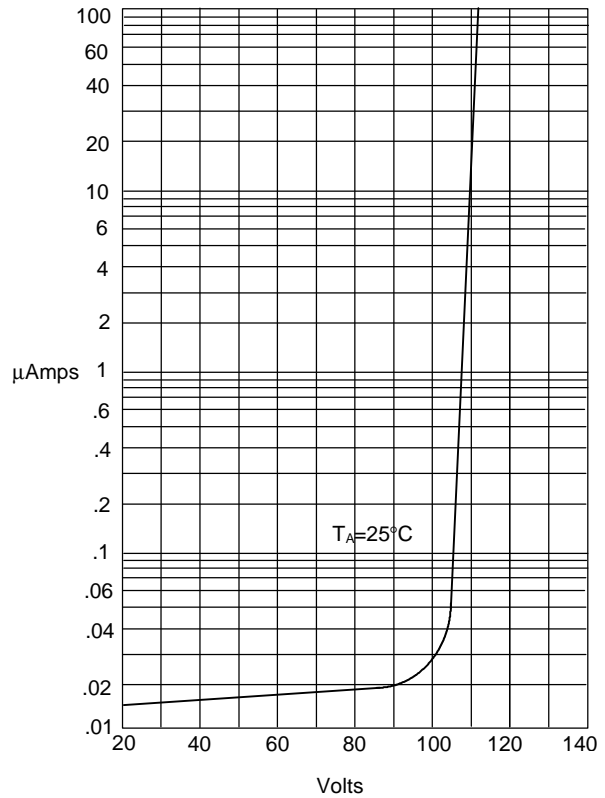


Figure 1  
Typical Forward Characteristics



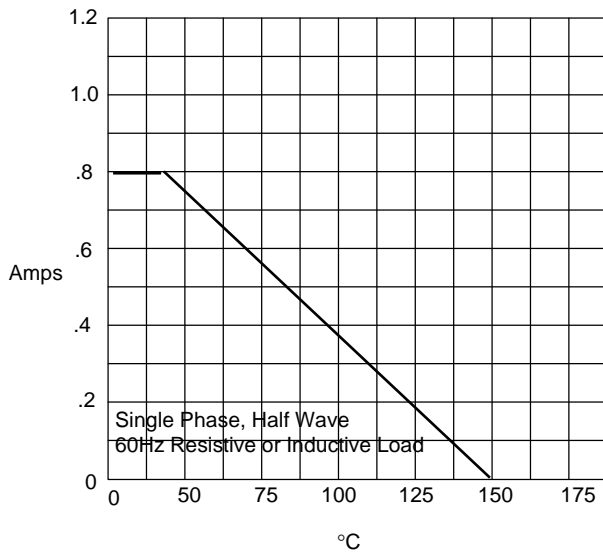
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



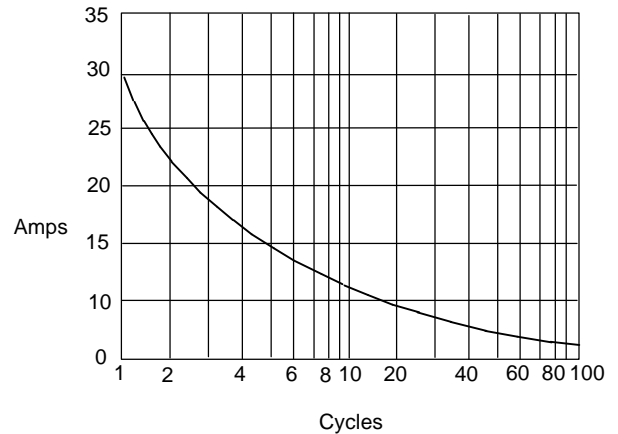
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles