Micro Commercial Components
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HD01 THRU HD10

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

Features

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

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

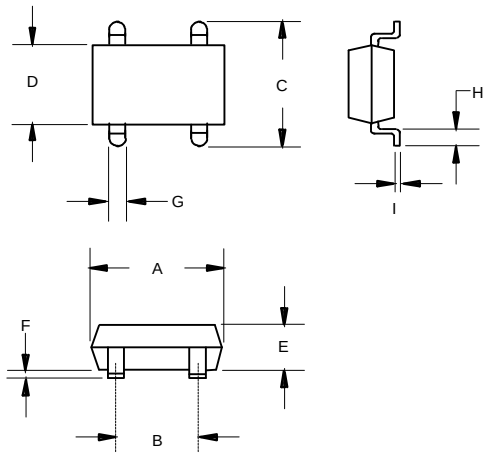
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
HD01	HD01	100V	70V	100V
HD02	HD02	200V	140V	200V
HD04	HD04	400V	280V	400V
HD06	HD06	600V	420V	600V
HD08	HD08	800V	560V	800V
HD10	HD10	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

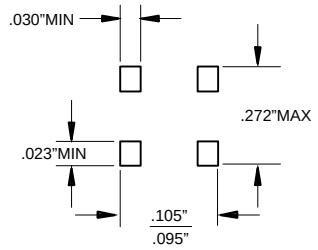
*Pulse Test: Pulse Width 300μsec, Duty Cycle 1%

HDDF



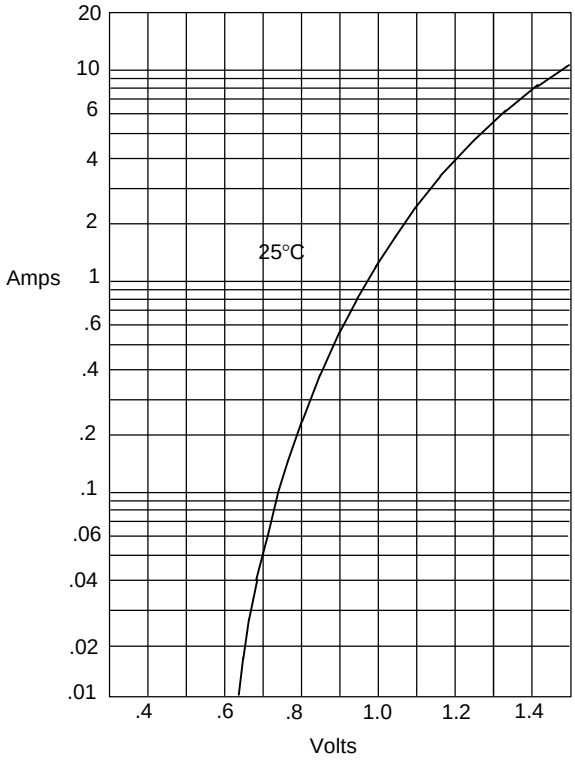
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.177	.193	4.50	4.90	
B	.091	.106	2.30	2.70	
C	---	.276	---	7.00	
D	.142	.157	3.60	4.00	
E	.091	.106	2.30	2.70	
F	---	.008	---	0.20	
G	.020	.031	0.50	0.80	
H	.028	.043	0.70	1.10	
I	.006	.014	0.15	0.35	

Suggested Solder Pad Layout



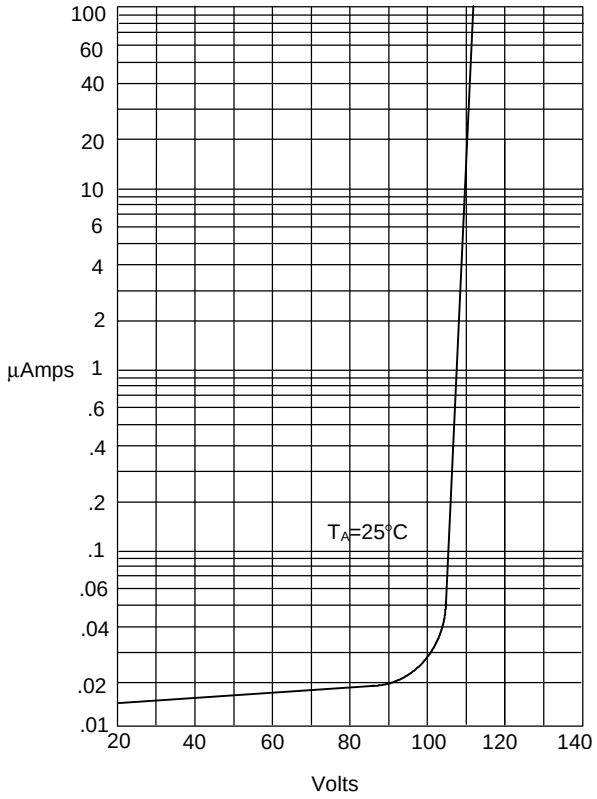
HD01 thru HD10

Figure 1
Typical Forward Characteristics



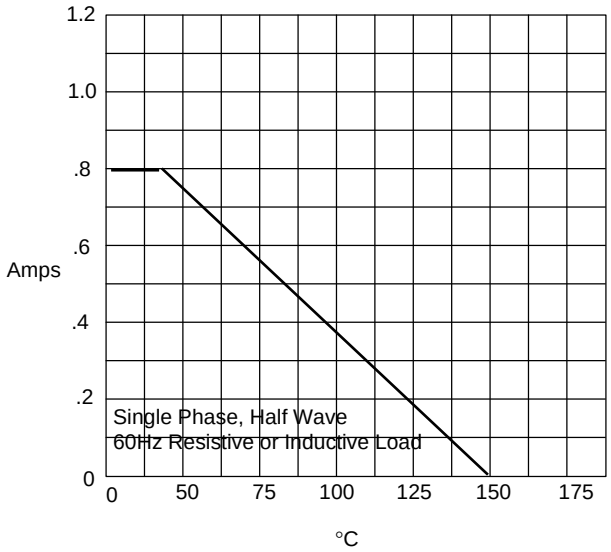
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



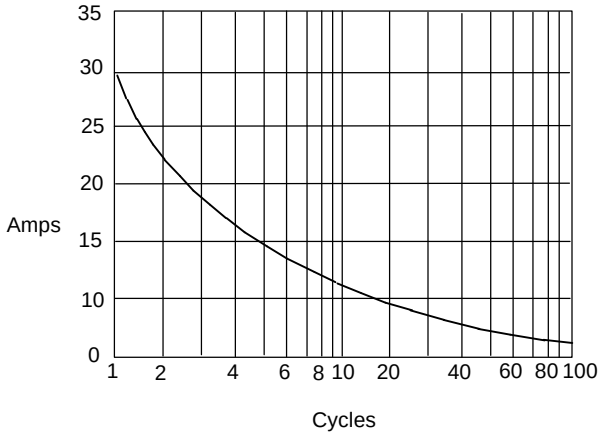
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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