



Micro Commercial Components

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# DB101 THRU DB107

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- 4-PIN DIP Package
- Glass Passivated Diode Construction
- UL Recognized File # E165989
- High Surge Current Capability  
 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and Rating 1

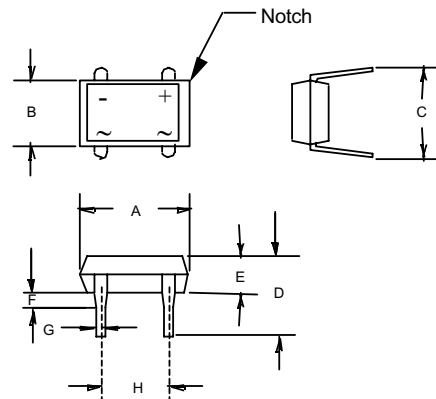
## 1 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

## Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DB101	DB101	50V	35V	50V
DB102	DB102	100V	70V	100V
DB103	DB103	200V	140V	200V
DB104	DB104	400V	280V	400V
DB105	DB105	600V	420V	600V
DB106	DB106	800V	560V	800V
DB107	DB107	1000V	700V	1000V

### DB-1



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1 A	$T_A = 40^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.1V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10µA 0.5mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.300	.350	7.60	8.90	
D	.236	.299	6.01	7.60	
E	.102	.130	2.60	3.30	
F	.060		1.50		Typ
G	.016	.022	.41	.56	Typ
H	.195	.205	5.00	5.20	

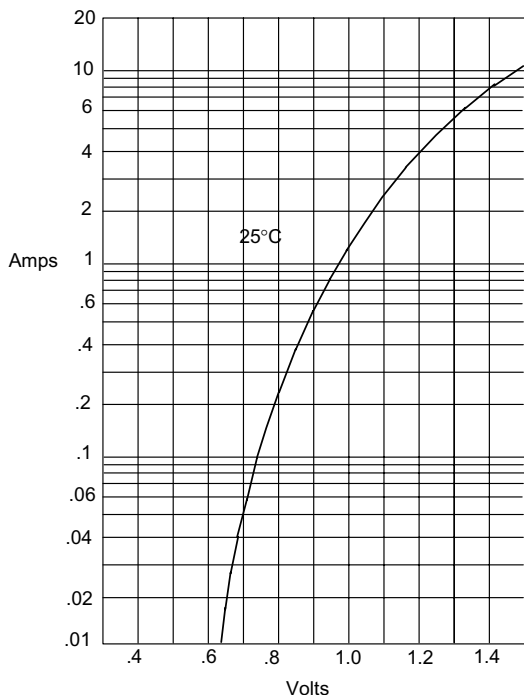
[www.mccsemi.com](http://www.mccsemi.com)

# DB101 thru DB107



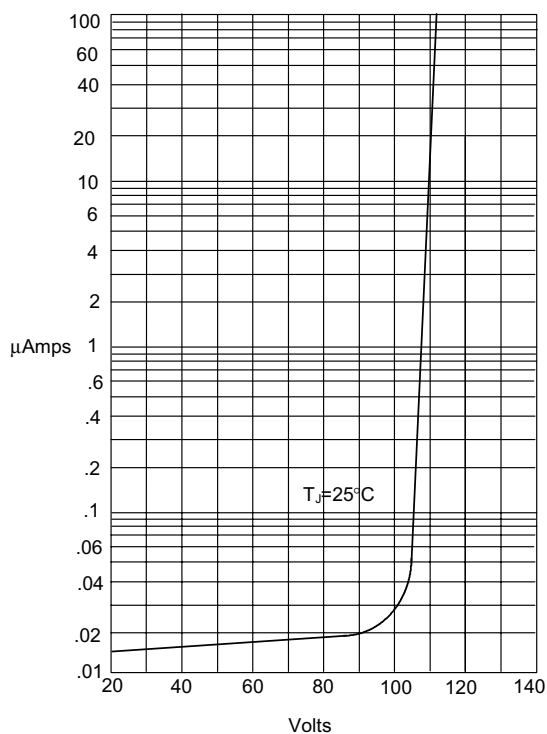
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Figure 1  
Typical Forward Characteristics



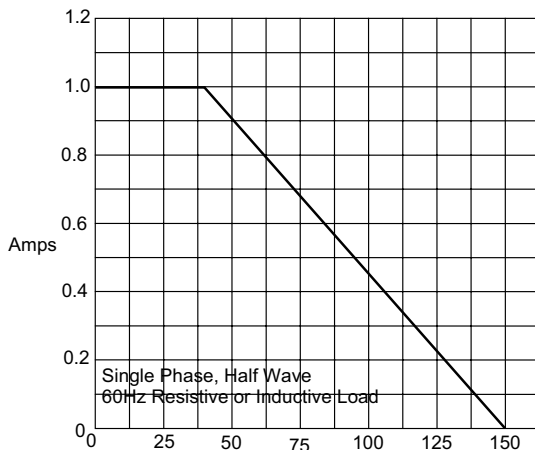
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



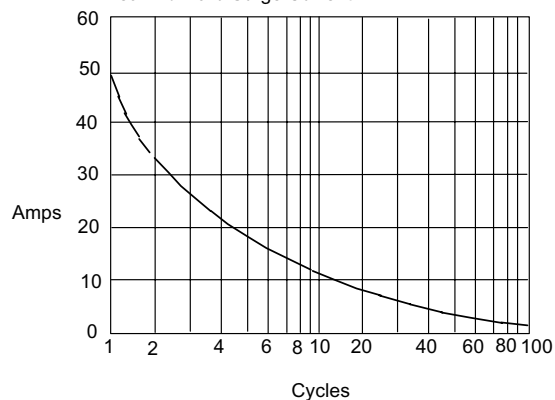
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



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



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### Ordering Information

Device	Packing
(Part Number)-BP	Bulk;50pcs/tube

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