



Micro Commercial Components

Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311

Phone: (818) 701-4933

Fax: (818) 701-4939

# 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

## 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

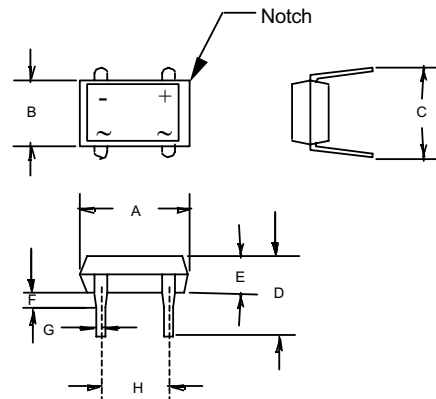
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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.

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

### DB-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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	

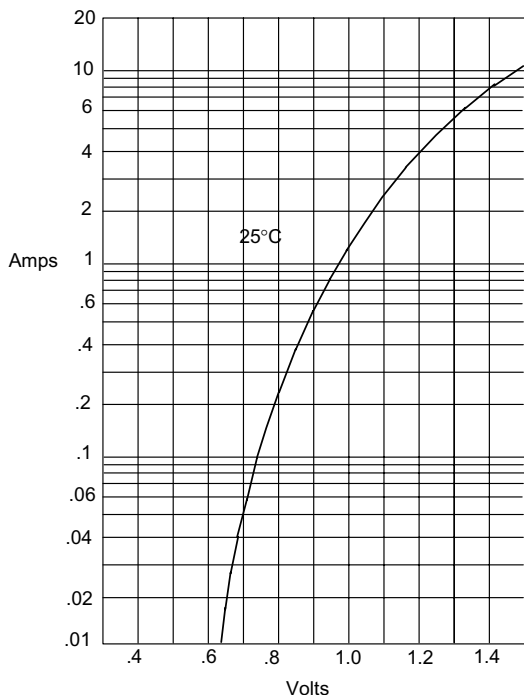
[www.mccsemi.com](http://www.mccsemi.com)

# DB101 thru DB107



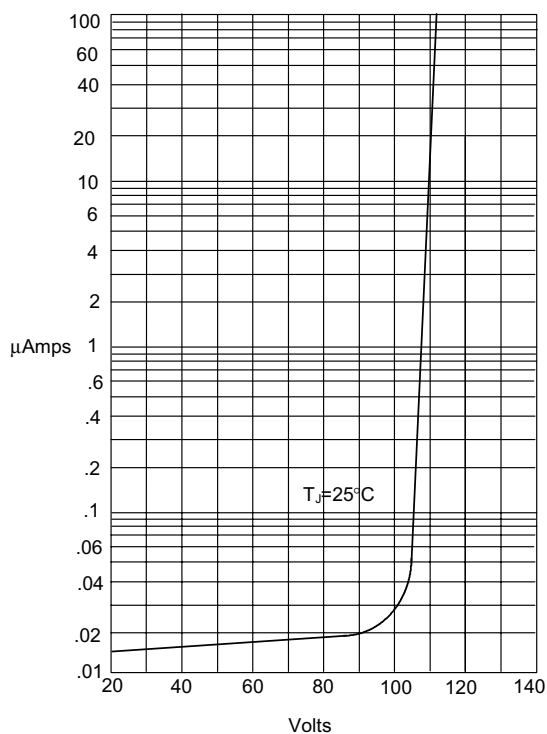
Micro Commercial Components

Figure 1  
Typical Forward Characteristics



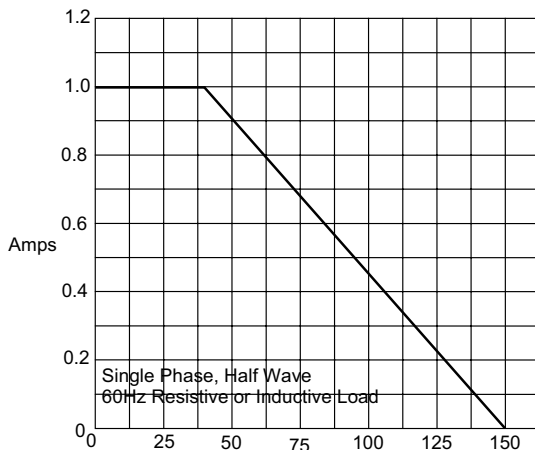
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



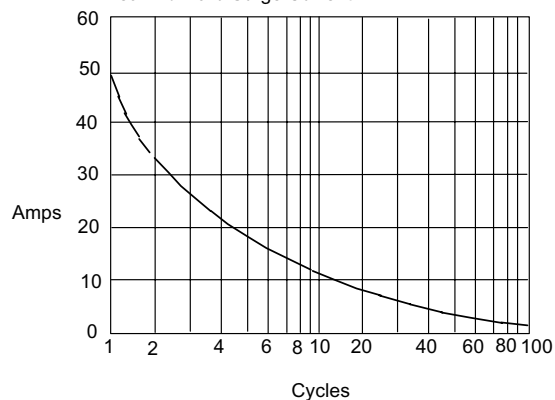
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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



Micro Commercial Components

### Ordering Information

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

**\*\*\*IMPORTANT NOTICE\*\*\***

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . *Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*APPLICATIONS DISCLAIMER\*\*\***

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.