



Micro Commercial Components



Micro Commercial Components  
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# DB151 THRU DB157

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- 4- pin DIP Package and Low Profile Package
- UL Recognized File # E165989
- High Surge Current Capability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

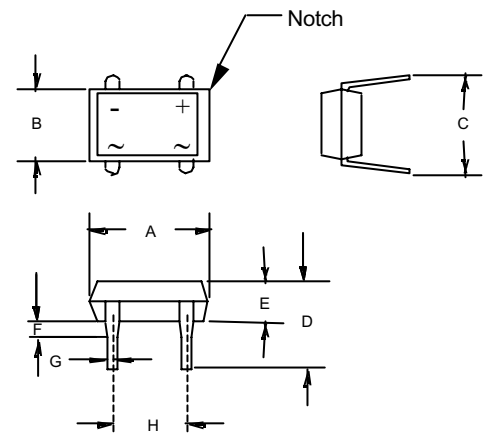
## 1.5 Amp Single Phase Bridge Rectifier 50 to 1000 Volts

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Thermal Resistance : Rthja:40°C/W; RthJL:15°C/W

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
DB151	DB151	50V	35V	50V
DB152	DB152	100V	70V	100V
DB153	DB153	200V	140V	200V
DB154	DB154	400V	280V	400V
DB155	DB155	600V	420V	600V
DB156	DB156	800V	560V	800V
DB157	DB157	1000V	700V	1000V

### DB-1



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.5 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	$I_{FM} = 1.5\text{A}(\text{Note } 2)$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Junction Capacitance	$C_J$	25pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

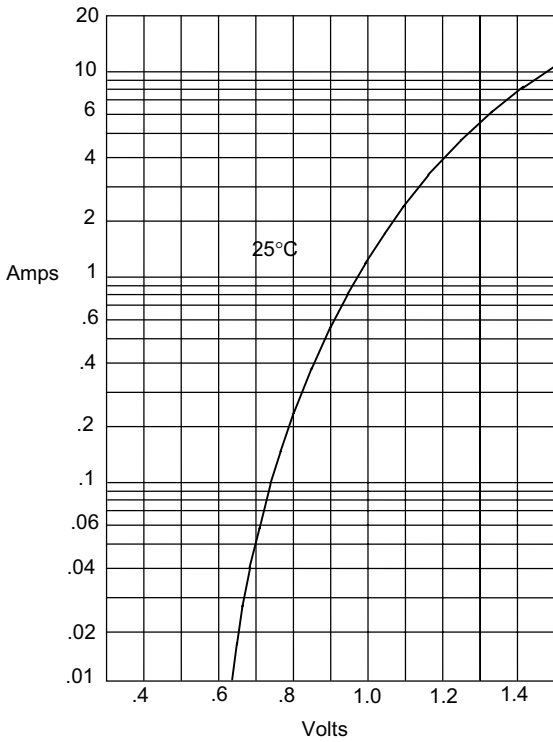
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

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

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	

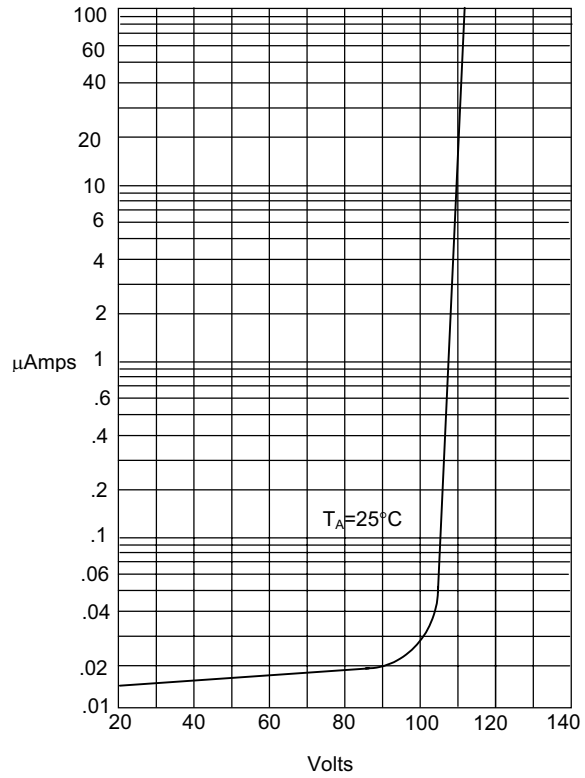
DB151 thru DB157

Figure 1  
Typical Forward Characteristics



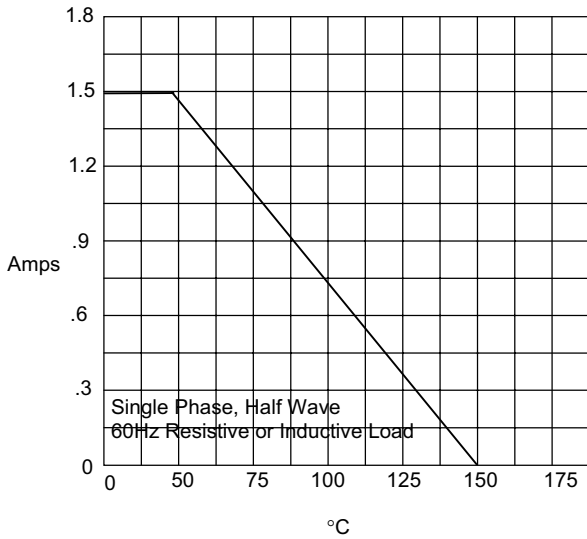
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



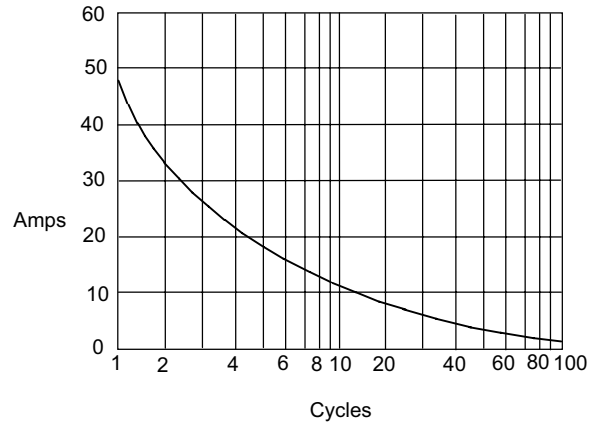
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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



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### Ordering Information :

Device	Packing
Part Number-BP	Bulk: 2.5Kpcs/Box

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