

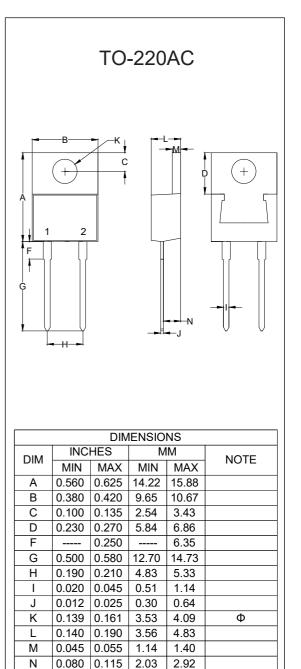
#### Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Surge Forward Current Capability
- Glass Passivated Chip Junction

# 15 Amp General Purpose Rectifier 1500 Volts

### Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>			
Working Peak Reverse Voltage	V <sub>RWM</sub>	1500	V	
DC Blocking Voltage	V <sub>R</sub>			
RMS Reverse Voltage	V <sub>RMS</sub>	1050	V	
Average Rectified Forward Current	I <sub>F(AV)</sub>	15	А	
Non-Repetitive Peak Surge Current @8.3ms Half Sine Wave	I <sub>FSM</sub>	200	А	
Current Squared Time @ 1ms≤t≤8.3ms	l <sup>2</sup> t	166	A <sup>2</sup> s	



#### Marking Code

Part Number	Marking Code
GP1515	GP1515

#### **Internal Structure**

Pin	Description	Simplified Outline	Graphic Symbol			
1	Cathode					
2	Anode	MCC.	PIN 1 ⊶			
		GP1515	PIN 2 • CASE			

Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.



### **Thermal characteristics**

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
TJ	Operating Junction Temperature Range		-55		150	°C
T <sub>stg</sub>	Storage Temperature Range		-55		150	°C
Rth <sub>(J-C)</sub>	Thermal Resistance from Junction to Case			2		°C/W

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Тур	Мах	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =15A;TJ=25°C		1.12	1.20	V
		I <sub>F</sub> =15A;T <sub>J</sub> =125°C		1.05	1.10	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =1500V;T <sub>J</sub> =25°C			5	uA
		V <sub>R</sub> =1500V;T <sub>J</sub> =125°C			100	uA
Junction Capacitance	CJ	V <sub>R</sub> =4V;f=1MHz;T <sub>J</sub> =25°C		40		pF



### **Curve Characteristics**

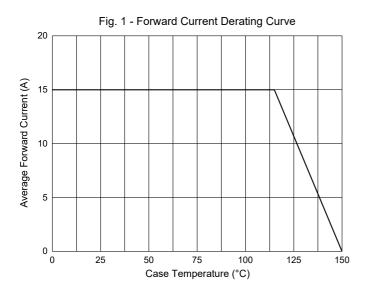
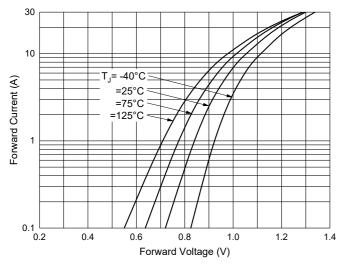
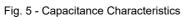
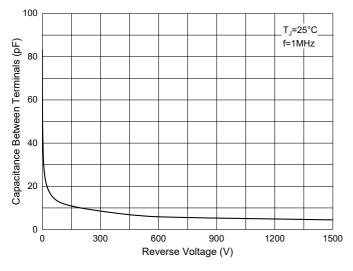


Fig. 3 - Typical Forward Characteristics







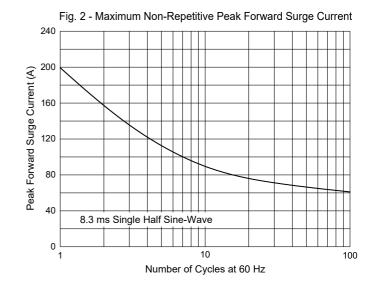
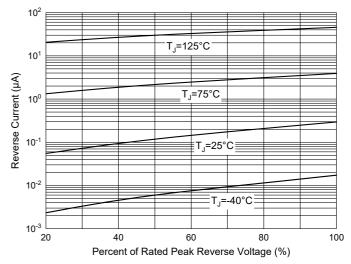


Fig. 4 - Typical Reverse Leakage Characteristics





#### **Ordering Information**

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

#### \*\*\*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. *Micro Commercial Components Corp*. products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

#### \*\*\*LIFE SUPPORT\*\*\*

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

#### \*\*\*CUSTOMER AWARENESS\*\*\*

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources**. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC): GP1515-BP