

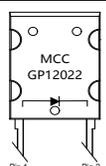
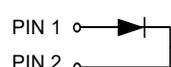
## Features

- Halogen Free. "Green" Device (Note 1)
- High Surge Forward Current Capability
- Very Low Forward Voltage Drop
- Glass Passivated Chip Junction
- Improved Thermal Behaviour
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	2200	V
Non-repetitive Reverse Blocking Voltage	$V_{RSM}$	2300	
Average Forward Current	$I_{F(AV)}$	120	A
Non-Repetitive Peak Surge Current @50Hz Half Sine Wave,1 Cycle	$I_{FSM}$	2200	
Current Squared Time @ $1ms \leq t \leq 10ms$	$I^2t$	24200	A <sup>2</sup> s

## Internal Structure

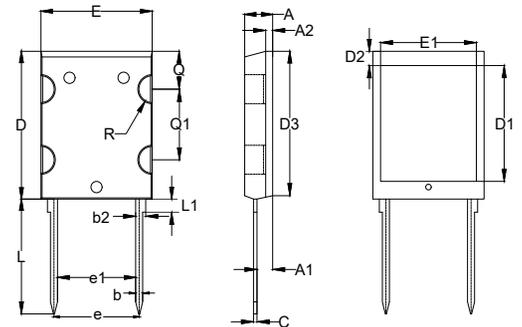
Pin	Description	Simplified Outline	Graphic Symbol
1	Anode		
2	Cathode		

### Note :

- 1.Halogen free "Green"products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
- 2.High temperature solder exemption applied, see EU directive annex 7a.

# 120 Amp High Voltage Standard Rectifier 2200 Volts

## TO-264P



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.189	0.205	4.80	5.20	
A1	0.102	0.118	2.60	3.00	
A2	0.045	0.053	1.14	1.34	
b	0.046	0.054	1.16	1.36	
b2	0.067	0.075	1.70	1.90	
C	0.021	0.029	0.53	0.73	
D	1.020	1.039	25.90	26.40	
D1	0.791	0.823	20.10	20.90	
D2	0.083	0.115	2.12	2.92	
D3	0.996	1.016	25.31	25.81	
E	0.772	0.795	19.60	20.20	
E1	0.659	0.691	16.75	17.55	
e	0.600		15.24		TYP
e1	0.550		13.98		TYP
L	0.780	0.820	19.82	20.82	
L1	0.081	0.101	2.07	2.57	
Q	0.252	0.276	6.40	7.00	
Q1	0.480	0.504	12.20	12.80	
R	0.087	0.115	2.22	2.92	

### Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T <sub>J</sub>	Operating Junction Temperature Range		-55		150	°C
T <sub>stg</sub>	Storage Temperature Range		-55		150	°C
Rth(J-C)	Thermal Resistance from Junction to Case			0.5		°C/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =120A;T <sub>J</sub> =25°C		1.2	1.31	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =2200V;T <sub>J</sub> =25°C			100	uA
		V <sub>R</sub> =2200V;T <sub>J</sub> =100°C			500	
		V <sub>R</sub> =2200V;T <sub>J</sub> =150°C			3500	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

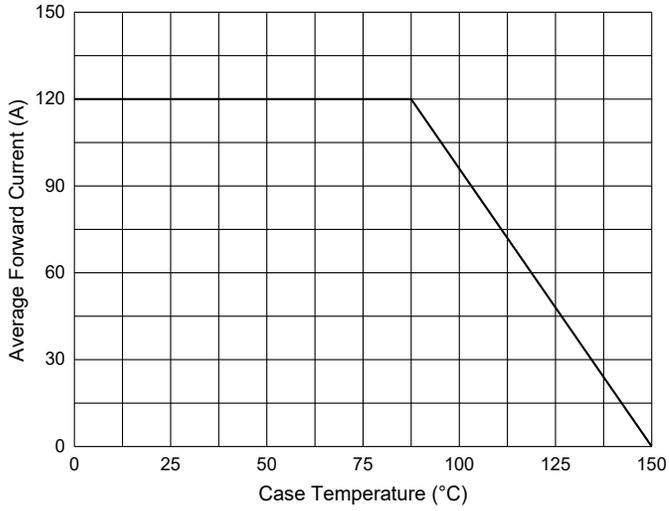


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

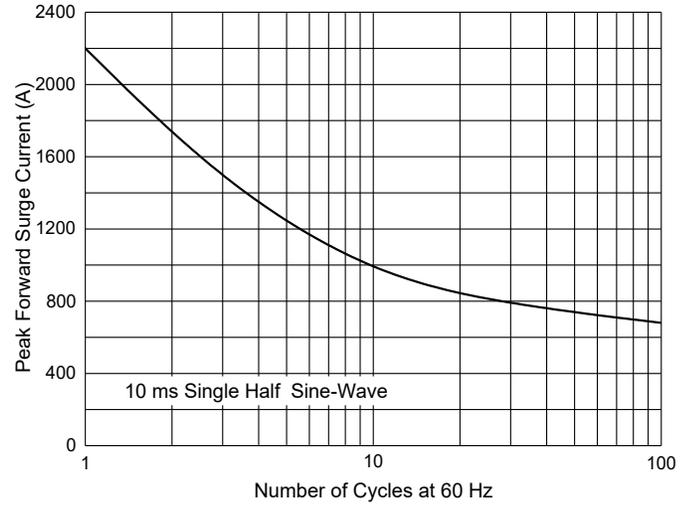


Fig. 3 - Typical Instantaneous Forward Characteristics

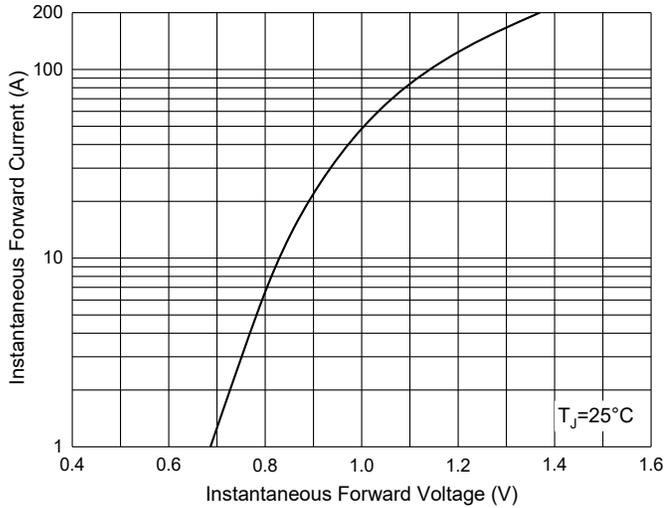
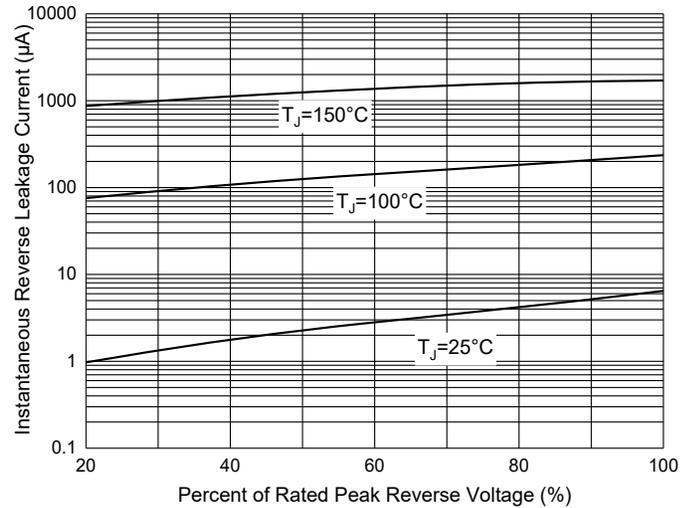


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Tube: 20pcs/Tube, 400pcs/Box, 2Kpcs/Ctn

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