

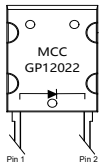
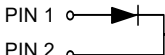
Features

- 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 ² s

Internal Structure

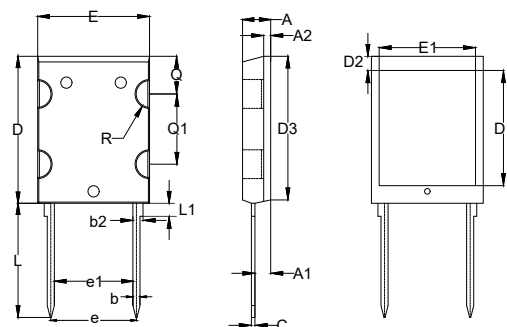
Pin	Description	Simplified Outline	Graphic Symbol
1	Anode		
2	Cathode		

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_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-C)}$	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_F	$I_F=120A; T_J=25^{\circ}C$		1.2	1.31	V
Reverse Current	I_R	$V_R=2200V; T_J=25^{\circ}C$			100	uA
		$V_R=2200V; T_J=100^{\circ}C$			500	
		$V_R=2200V; T_J=150^{\circ}C$			3500	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

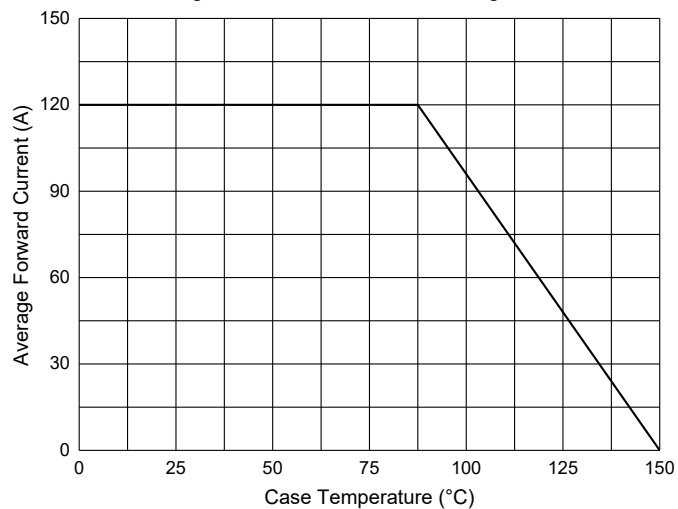


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

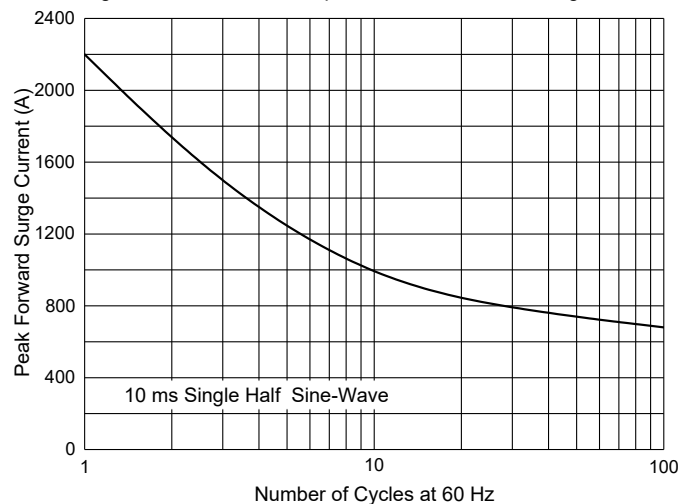


Fig. 3 - Typical Instantaneous Forward Characteristics

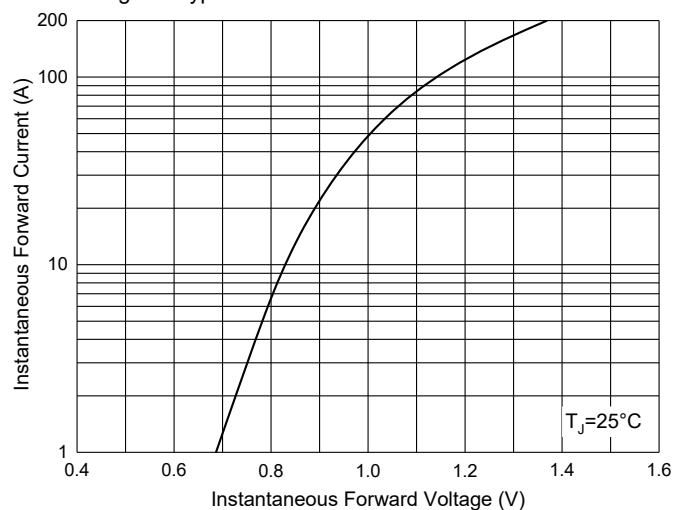
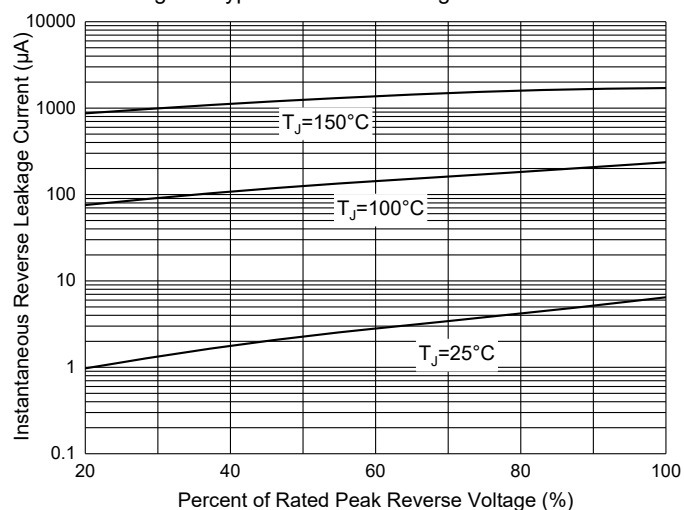


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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