

#### **Features**

- High Voltage
- Low Leakage
- · Glass Passivated Chip
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)

# 0.2 Amp High Voltage Silicon Rectifier 3000 to 6000 Volts

# **Maximum Ratings**

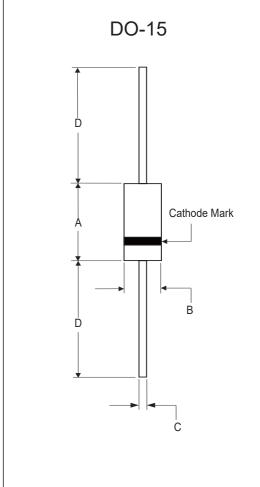
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R3000GP	R3000GP	3000V	2100V	3000V
R4000GP	R4000GP	4000V	2800V	4000V
R5000GP	R5000GP	5000V	3500V	5000V
R6000GP	R6000GP	6000V	4200V	6000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	200mA	T <sub>A</sub> =60°C
Peak Forward Surge Current	I <sub>FSM</sub>	15A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage R3000GP R4000GP R5000GP-R6000GP	V <sub>F</sub>	2.3V 3.5V 5.0V	I <sub>FM</sub> =0.5A; T <sub>J</sub> =50°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0µA	T <sub>J</sub> =25°C
Maximum reverse recovery time	t <sub>rr</sub>	>1200nS	I <sub>F</sub> =0.5A,I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A(RG1 Circuit)

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



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.230	0.300	5.80	7.60	
В	0.104	0.140	2.60	3.60	
С	0.026	0.035	0.70	0.90	
D	1.000		25.40		



## **Curve Characteristics**

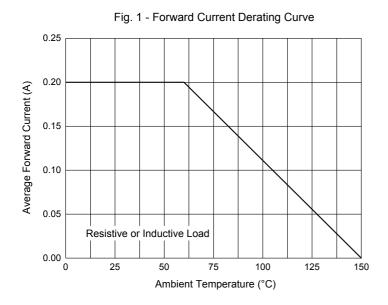


Fig. 3 - Typical Instantaneous Forward Characteristics

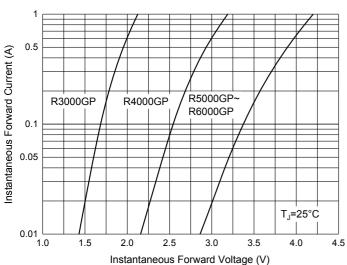


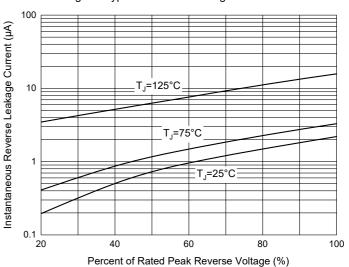
Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

15

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





# **Ordering Information**

Device	Packing		
(Part Number)-TP	Tape&Reel: 4Kpcs/Reel		
(Part Number)-AP	Ammo Packing: 3Kpcs/Ammo Box		
(Part Number)-BP	Bulk:500pcs/Box,25Kpcs/Carton		

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

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