

**R3000GP  
 THRU  
 R6000GP**

**200 Milliamp  
 High Voltage  
 Silicon Rectifier  
 3000 to 6000 Volts**

**Features**

- Halogen free available upon request by adding suffix "-HF"
- High Voltage
- Low Leakage
- Low Forward Voltage Drop
- Glass passivated chip
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

**Maximum Ratings**

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

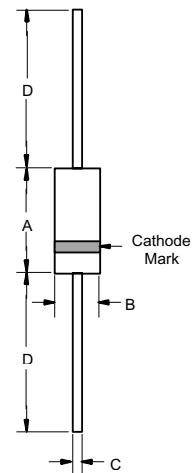
Microsemi Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R3000GP	R3000GP	3000V	2100V	3000V
R4000GP	R4000GP	4000V	2800V	4000V
R5000GP	R5000GP	5000V	3500V	5000V
R6000GP	R6000GP	6000V	4200V	6000V

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

Average Forward Current	$I_{F(AV)}$	200mA	$T_A = 60^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	15A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	2.3V	$I_{FM} = 0.5A;$ $T_A = 50^\circ\text{C}$
R3000GP		3.5V	
R4000GP R5000GP~R6000GP		5.0V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA	$T_A = 25^\circ\text{C}$
Maximum reverse recovery time	$T_{rr}$	>1200	$I_F=0.5A, I_R=1.0A,$ $I_{RR}=0.25A(\text{RG1 circuit})$

Note: 1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

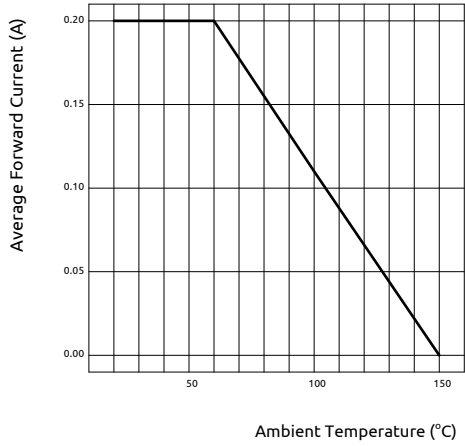
**DO-15**



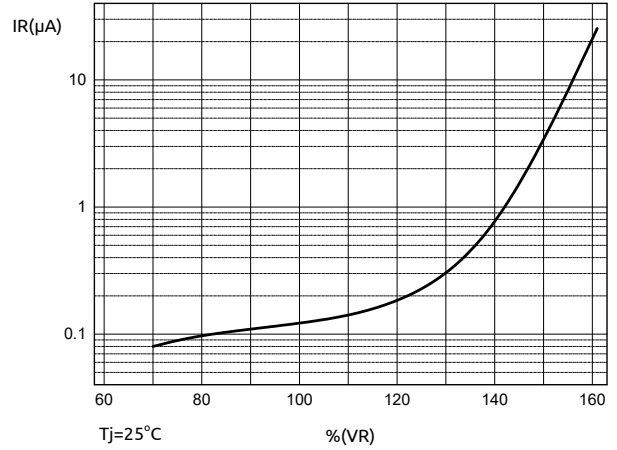
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

## Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

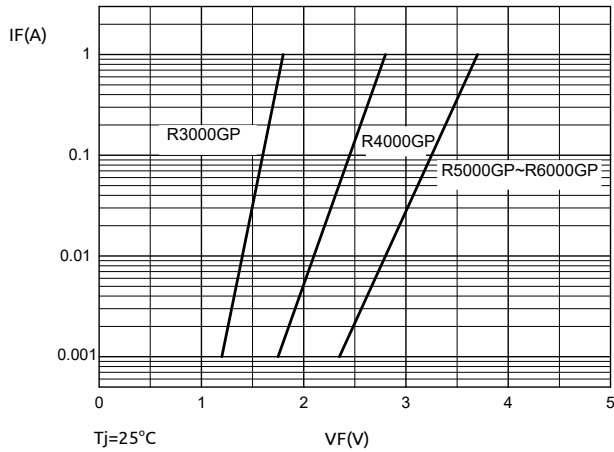
**Fig.1 Forward Current Derating Curve**



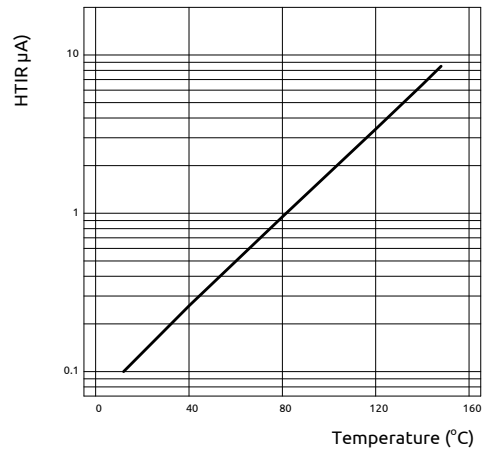
**Fig.2 Typical Reverse Characteristics**



**Fig.3 - Typical Forward Characteristics**



**Fig.4 - Typical High Temperature Reverse Leakage**





Micro Commercial Components

Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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