

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- · High Current Capability
- Fast Switching For Higher Efficiency
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# 0.5 Amp High Voltage Fast Recovery Glass Passivated Rectifier 2000 Volts

## **Maximum Ratings**

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

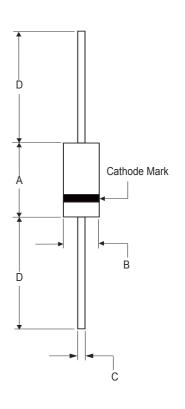
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
R2000FGP	R2000FGP	2000V	1400V	2000V

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

Average Forward Current	I <sub>F(AV)</sub>	500mA	T <sub>A</sub> = 50°C		
Peak Forward Surge Current	I <sub>FSM</sub>	30A	8.3ms,Half Sine		
Maximum Instantaneous	V <sub>F</sub>	2.5V	I <sub>FM</sub> =0.5A		
Forward Voltage		1.8V	I <sub>FM</sub> =0.1A		
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 50μA	T <sub>A</sub> =25°C T <sub>A</sub> =100°C		
Typical Junction Capacitance	С	30pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V		
Maximum Reverse Recovery Time	t <sub>rr</sub>	500nS	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>rr</sub> =0.25A		

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

## DO-41



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.160	0.205	4.10	5.20	
В	0.080	0.107	2.00	2.70	Ф
С	0.028	0.035	0.71	0.90	Ф
D	1.000		25.40		



#### **Curve Characteristics**

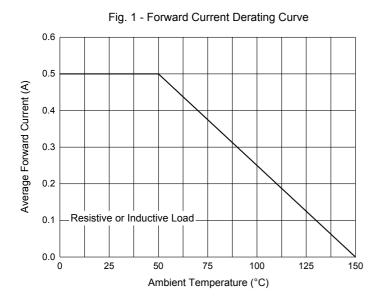
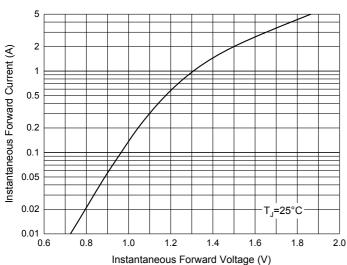


Fig. 3 - Typical Instantaneous Forward Characteristics



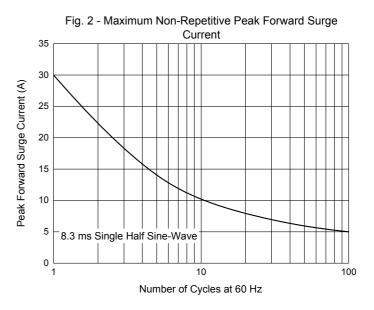
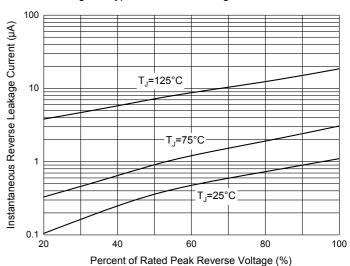


Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing		
(Part Number)-TP	Tape&Reel: 5Kpcs/Reel		
(Part Number)-AP	Ammo Packing: 5Kpcs/Ammo Box		
(Part Number)-BP	Bulk:1Kpcs/Box,50Kpcs/Carton		

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

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