

#### **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Low Power Loss, High Efficiency
- · Low Leakage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# 3 Amp High Efficiency Glass Passivated Rectifier 50 to 600 Volts

## **Maximum Ratings**

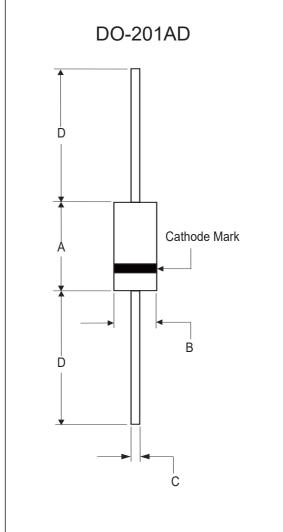
- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 30°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SF31G	SF31G	50V	35V	50V
SF32G	SF32G	100V	70V	100V
SF34G	SF34G	200V	140V	200V
SF35G	SF35G	300V	210V	300V
SF36G	SF36G	400V	280V	400V
SF38G	SF38G	600V	420V	600V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	3.0A	T <sub>A</sub> =55°C
Peak Forward Surge Current	I <sub>FSM</sub>	125A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SF31G-SF34G SF35G-SF36G SF38G	V <sub>F</sub>	0.95V 1.27V 1.75V	I <sub>FM</sub> =3.0A; T <sub>A</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0μA 150μA	T <sub>J</sub> =25°C; T <sub>J</sub> =125°C
Maximum Reverse Recovery Time	t <sub>rr</sub>	35ns	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; Irr=0.25A
Typical Junction Capacitance SF31G-SF34G SF35G-SF38G	С	50pF 30pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

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



DIMENSIONS						
INCHES		MM		NOTE		
MIN	MAX	MIN	MAX	NOTE		
0.287	0.374	7.30	9.50			
0.189	0.208	4.80	5.30			
0.048	0.052	1.20	1.30			
1.000		25.40				
	MIN 0.287 0.189 0.048	INCHES MIN MAX 0.287 0.374 0.189 0.208 0.048 0.052	INCHES   M   MIN   MAX   MIN   0.287   0.374   7.30   0.189   0.208   4.80   0.048   0.052   1.20	INCHES         MM           MIN         MAX         MIN         MAX           0.287         0.374         7.30         9.50           0.189         0.208         4.80         5.30           0.048         0.052         1.20         1.30		



## **Curve Characteristics**

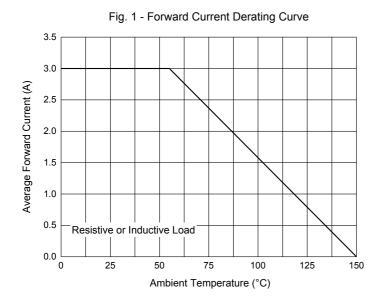


Fig. 3 - Typical Instantaneous Forward Characteristics

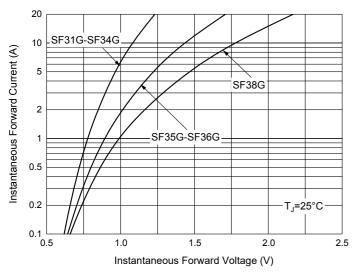
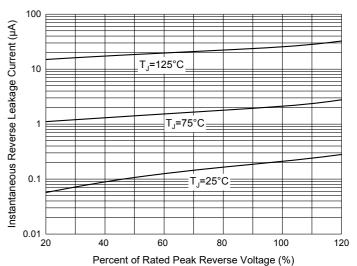


Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing		
Part Number-TP	Tape&Reel: 1.2Kpcs/Reel		
Part Number-AP	Ammo Packing: 1.2Kpcs/Ammo Box		
Part Number-BP	Bulk:500pcs/Box,12Kpcs/Carton		

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

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