

**Micro Commercial Components** 



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# SF31G THRU SF38G

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

## **Features**

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Low power loss, high efficiency
- Low Forward Voltage Drop and Low Leakage
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

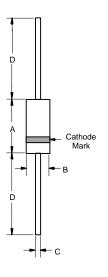
MCC	Device	Maximum	Maximum	Maximum
Catalog	Marking	Reccurrent	RMS	DC
Number		Peak Reverse	Voltage	Blocking
		Voltage		Voltage
SF31G	SF31G	50V	35V	50V
SF32G	SF32G	100V	70V	100V
SF34G	SF34G	200V	140V	200V
SF35G	SF35G	300V	210V	300V
SF36G	SF36G	400V	280V	400V
SF38G	SF38G	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward Current	I <sub>F(AV)</sub>	3 A	T <sub>A</sub> = 55°C	
Peak Forward Surge	$I_{FSM}$		8.3ms, half sine	
Current		125A		
Maximum Instantaneous				
Forward Voltage		0.95V		
SF31G-35G SF36G		1.27V		
SF38G SF38G	$V_{F}$	1.75V	$I_{FM} = 3.0A;$	
			$T_A = 25^{\circ}C$	
Maximum DC				
Reverse Current At	I <sub>R</sub>	5 μΑ	$T_A = 25^{\circ}C$	
Rated DC Blocking		50 μΑ	$T_A = 150^{\circ}C$	
Voltage				
Maximum Reverse	$T_{rr}$		$I_F=0.5A, I_R=1.0A,$	
Recovery Time		35.0nS	I <sub>rr</sub> =0.25A	
Typical Junction				
Capacitance	_		Management	
SF31G~35G SF36G~38G	$C_{J}$	50pF 30pF	Measured at	
Si 300~300		John	$1.0MHz, V_R=4.0V$	

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

## **DO-201AD**



DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.287	.374	7.30	9.50			
В	.189	.208	4.80	5.30			
C	.048	.052	1.20	1.30			
D	1.000		25.40				



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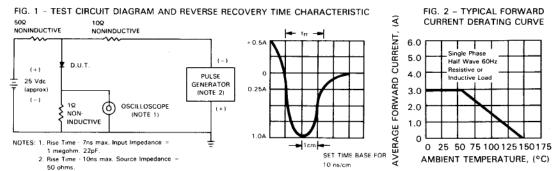


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

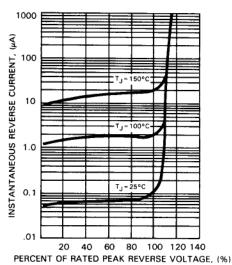


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

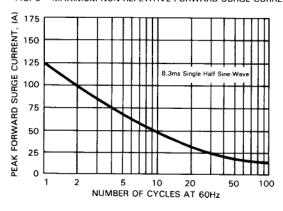


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

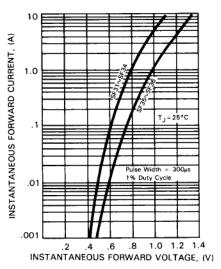
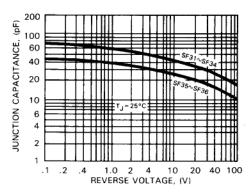


FIG. 6 - TYPICAL JUNCTION CAPACITANCE





### **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: 12Kpcs/Carton

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