

## SF11G Thru SF18G

### Features

- Super Fast Switching Speed
- Marking : Type Number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 80.0°C/W Junction To Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SF11G	50V	35V	50V
SF12G	100V	70V	100V
SF13G	150V	105V	150V
SF14G	200V	140V	200V
SF15G	300V	210V	300V
SF16G	400V	280V	400V
SF18G	600V	420V	600V

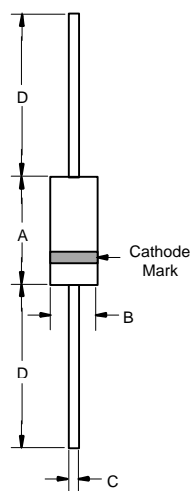
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_L = 85^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30.0A	8.3ms, half sine
Maximum Instantaneous Forward Voltage SF11G-SF14G SF15G-SF16G SF18G	$V_F$	0.95V 1.30V 1.70V	$I_{FM} = 1.0A$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0μA 100μA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Maximum Reverse Recovery Time	$T_{RR}$	35.0nS	$I_F = 0.5A$ , $I_R = 1.0A$ , $I_{RR} = 0.25A$
Typical Junction Capacitance SF11G-SF14G SF15G-SF18G	$C_J$	20pF 10pF	Measured at 1.0MHz, $V_R = 4.0V$

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

## 1.0 Amp Glass Passivated Super Fast Recovery Rectifiers 50 to 600 Volts

### DO-41



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

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FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

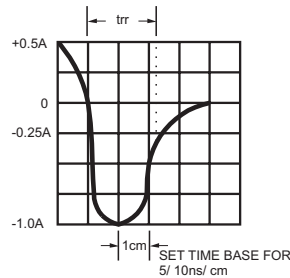
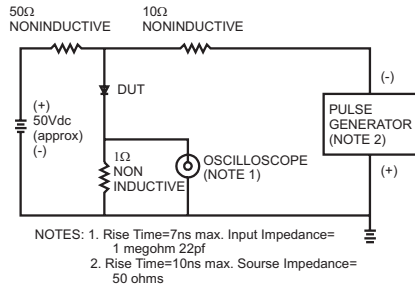


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

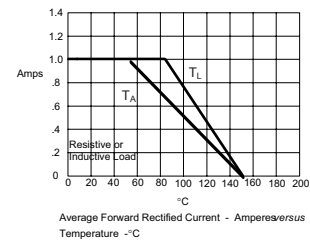


FIG.3- TYPICAL REVERSE CHARACTERISTICS

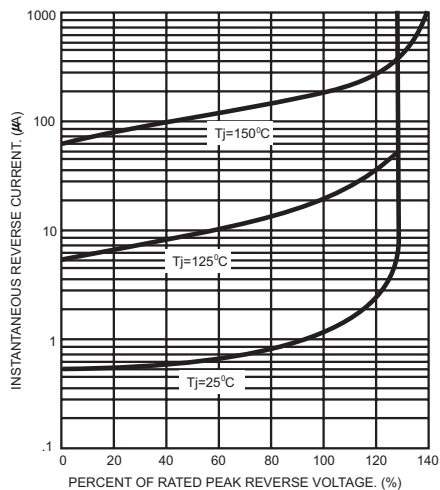


FIG.4- TYPICAL FORWARD CHARACTERISTICS

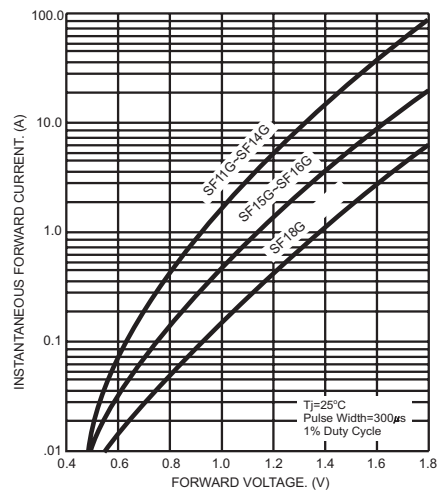


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

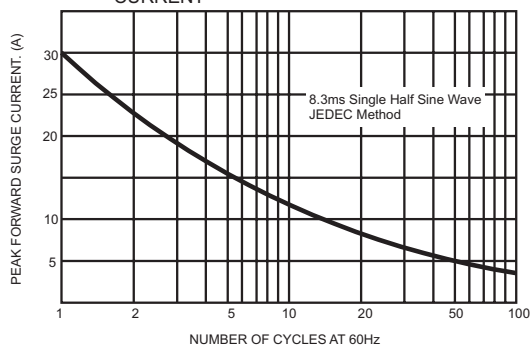
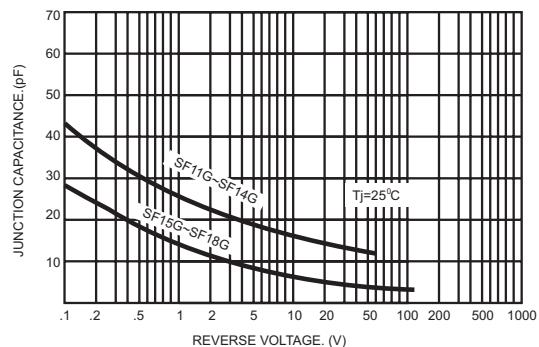


FIG.6- TYPICAL JUNCTION CAPACITANCE



## Ordering Information :

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

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

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