

# 1N4933GP THRU 1N4937GP

## 1 Amp Glass Passivated Fast Recovery Rectifier 50 - 600 Volts

### Features

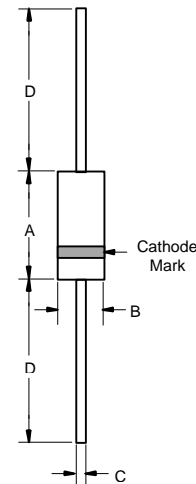
- Glass Passivated Junction
- Low Leakage Current
- Metalurgically Bonded Construction
- Low Cost
- Fast Switching

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

Item Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N4933GP	1N4933GP	50V	35V	50V
1N4934GP	1N4934GP	100V	70V	100V
1N4935GP	1N4935GP	200V	140V	200V
1N4936GP	1N4936GP	400V	280V	400V
1N4937GP	1N4937GP	600V	420V	600V

### DO-41



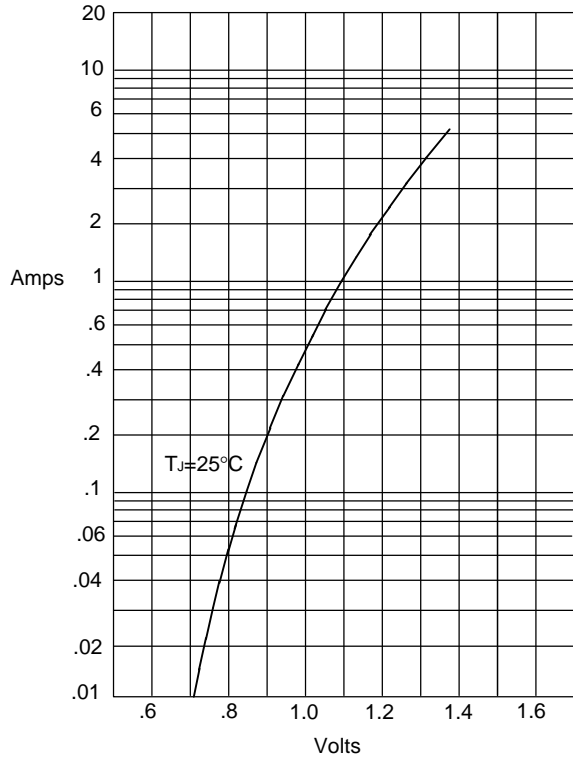
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0 $\mu\text{A}$ 50 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 1%

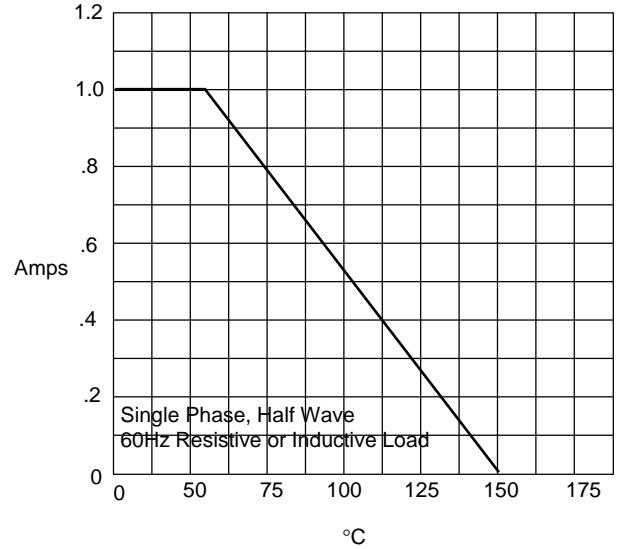
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

Figure 1  
 Typical Forward Characteristics



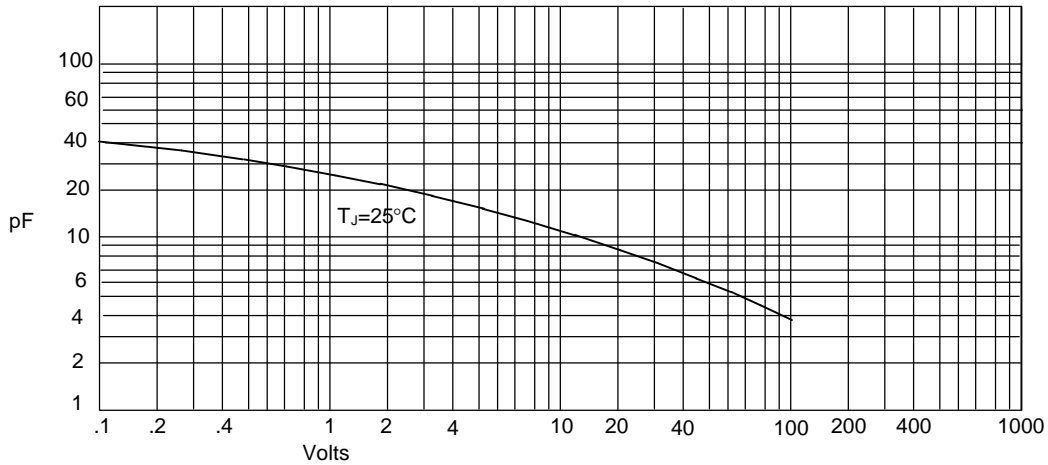
Instantaneous Forward Current - Amperes *versus*  
 Instantaneous Forward Voltage - Volts

Figure 2  
 Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
 Ambient Temperature - °C

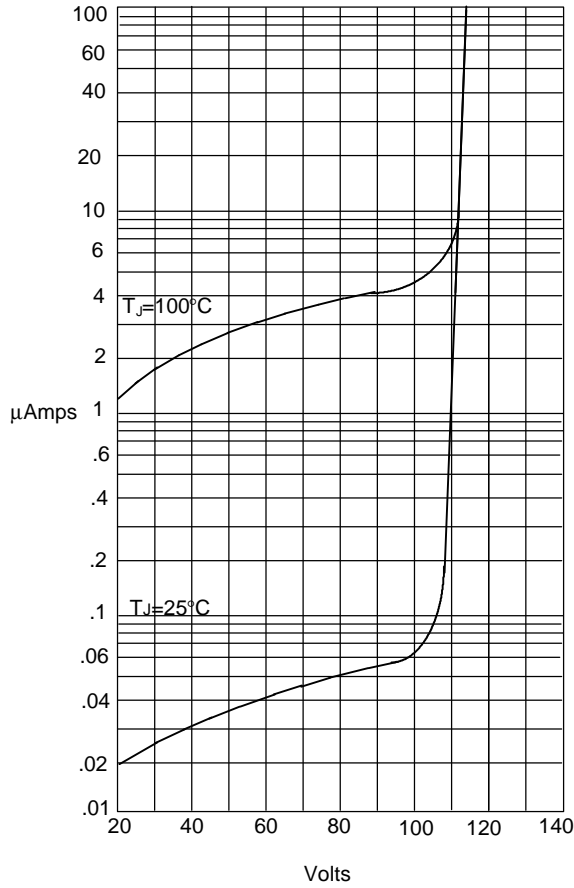
Figure 3  
 Junction Capacitance



Junction Capacitance - pF *versus*  
 Reverse Voltage - Volts

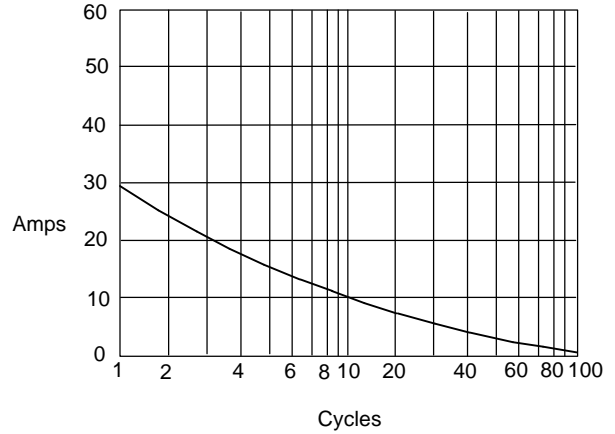
1N4933GP thru 1N4937GP

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus  
Number Of Cycles At 60Hz - Cycles

Figure 6  
Reverse Recovery Time Characteristic And Test Circuit Diagram

