

# KI SEMICONDUCTOR

**W005M  
THRU  
W10M**

## Features

- Low Profile Package
- Any Mounting Position
- Surge Overload Rating Of 50 Amps
- UL Recognized File # E165989

**1.5 Amp Single Phase  
Bridge Rectifier  
50 to 1000 Volts**

## Maximum Ratings

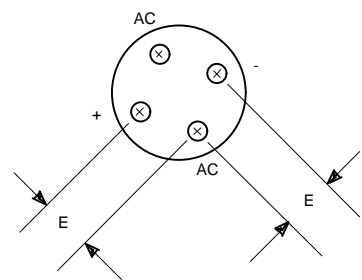
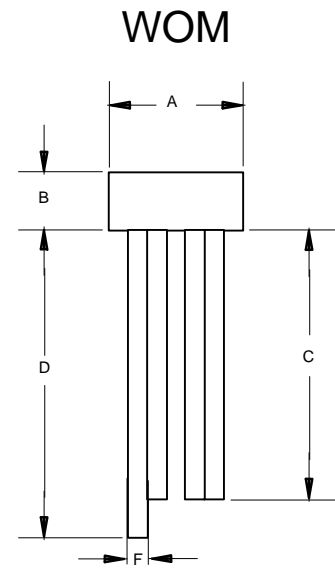
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
W005M	W005M	50V	35V	50V
W01M	W01M	100V	70V	100V
W02M	W02M	200V	140V	200V
W04M	W04M	400V	280V	400V
W06M	W06M	600V	420V	600V
W08M	W08M	800V	560V	800V
W10M	W10M	1000V	700V	1000v

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.5A	$T_J = 25^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	50A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element	$V_F$	1.0V	$I_{FM} = 1.5A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu$ A 1mA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$

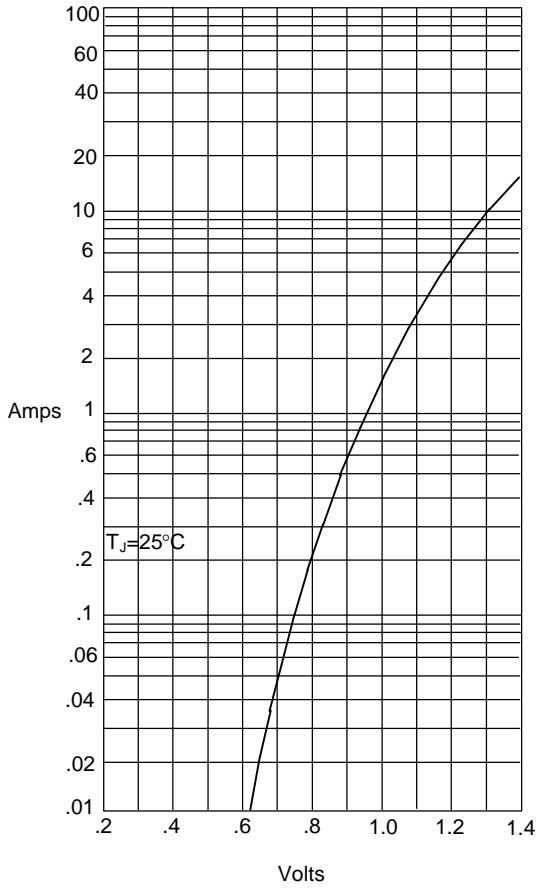
\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 1%



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.358	-----	9.10	
B	----	.225	-----	5.70	
C	1.000	---	25.40	---	
D	1.098	---	27.90	---	
E	.180	.220	4.60	5.60	
F	.030	.032	0.76	0.81	

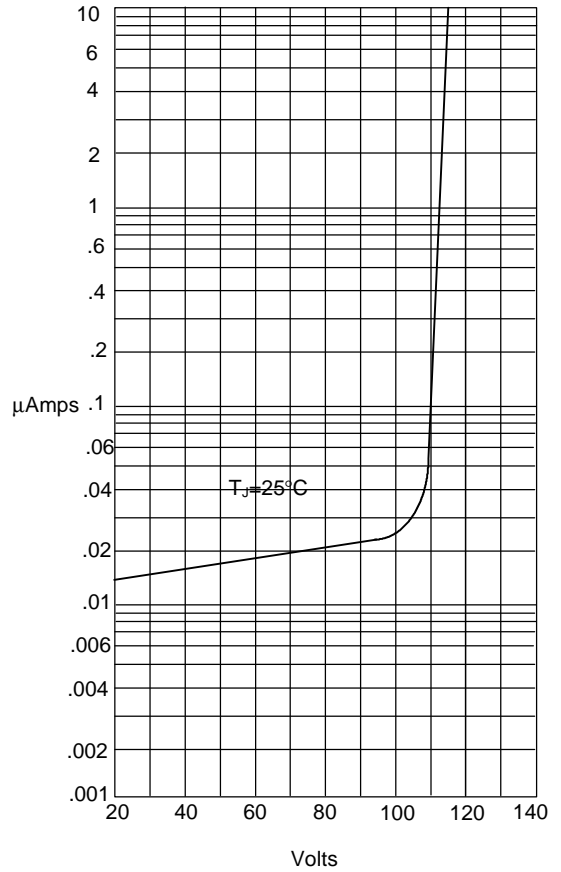
# W005M thru W10M

Figure 1  
Typical Forward Characteristics



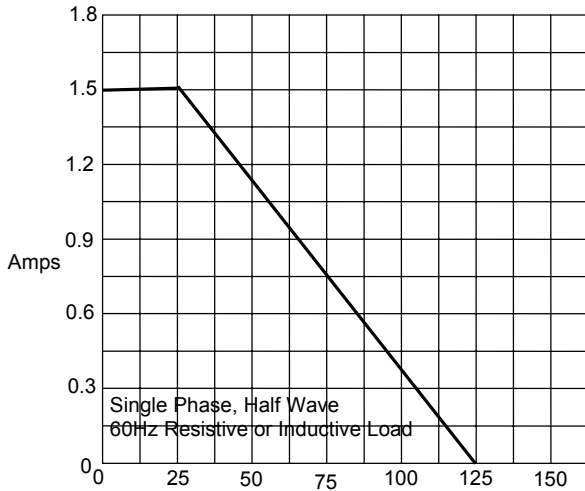
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



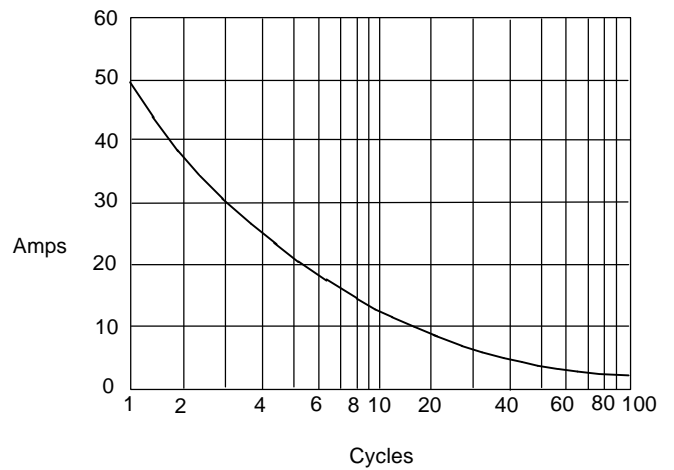
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus  
Case Temperature - °C

Figure 4  
Peak Forward Surge Current



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