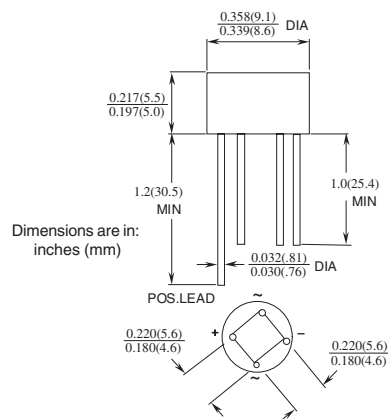


## W005G - W10G

### Features

- Surge overload rating: 50 amperes peak.
- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.



## 1.5 Ampere Glass Passivated Bridge Rectifiers

### Absolute Maximum Ratings\* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$I_O$	Average Rectified Current @ $T_A = 50^\circ\text{C}$	1.5	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
$P_D$	Total Device Dissipation Derate above $25^\circ\text{C}$	3.47 28	W mW/ $^\circ\text{C}$
$R_{JA}$	Thermal Resistance, Junction to Ambient,** per leg	36	$^\circ\text{C}/\text{W}$
$R_{JL}$	Thermal Resistance, Junction to Lead,** per leg	11	$^\circ\text{C}/\text{W}$
$T_{\text{stg}}$	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

\*\*Device mounted on PCB with 0.375" (9.5 mm) lead length.

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Device							Units
	005G	01G	02G	04G	06G	08G	10G	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated $V_R$ )	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total bridge @ rated $V_R$ $T_A = 25^\circ\text{C}$	5.0							A
$T_A = 125^\circ\text{C}$	500							A
Maximum Forward Voltage Drop, per bridge @ 1.0 A	1.0							V
$I^2t$ rating for fusing $t < 8.3$ ms	10							$\text{A}^2\text{Sec}$
Typical Junction Capacitance, per leg $V_R = 4.0$ V, $f = 1.0$ MHz	15							pF

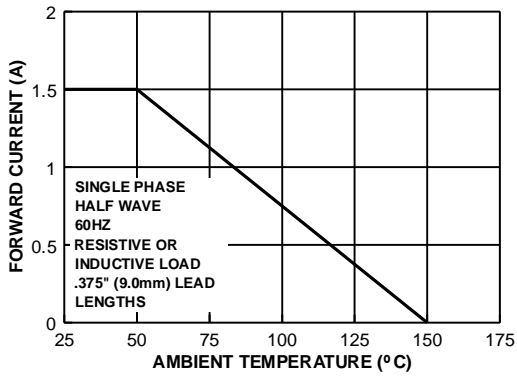
# Glass Passivated Bridge Rectifiers

(continued)

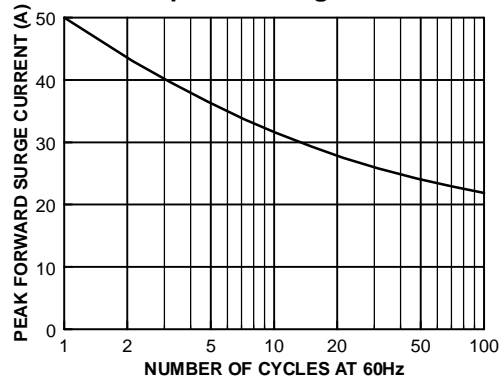
W005G - W10G

## Typical Characteristics

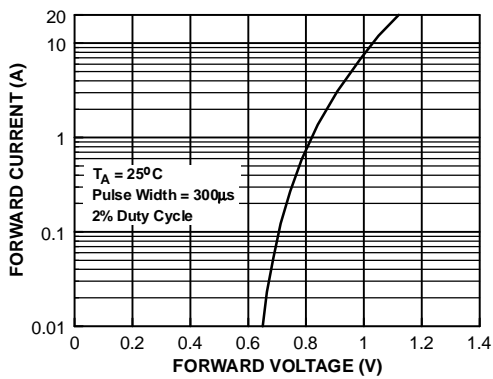
### Forward Current Derating Curve



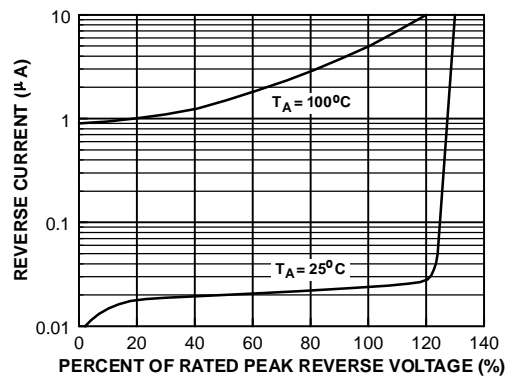
### Non-Repetitive Surge Current



### Forward Characteristics



### Reverse Characteristics



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FASTr™	SuperSOT™-6
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