

# W Series



## Single Phase Bridge Rectifiers



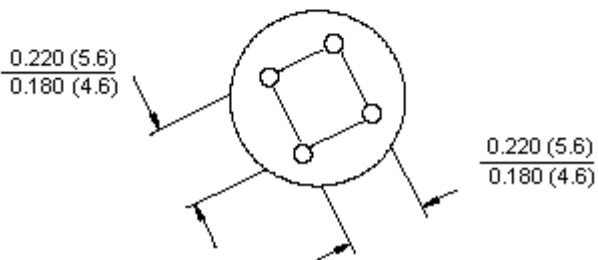
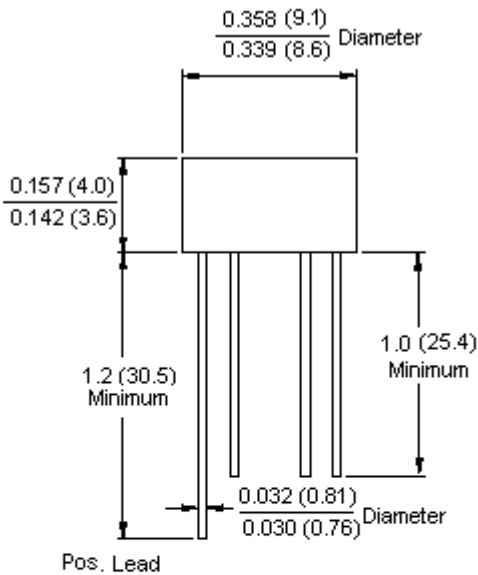
### Features:

- Surge overload ratings to 40 amperes peak.
- Ideal for printed circuit board.
- Reliable low cost construction technique results in inexpensive product.
- High temperature soldering guaranteed : 250°C/10 seconds/0.375" (9.5mm) lead length at lbs., (2.3kg) tension.

### Mechanical Data:

- Cases : Moulded plastic.  
Lead : Solder plated.  
Polarity : As marked.

### RB-15



Dimensions : Inches (Millimetres)



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### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	W01	W02	W04	W06	W08	W10	Unit
Maximum recurrent peak reverse voltage	100	200	400	600	800	1000	V
Maximum RMS voltage	70	140	280	420	560	700	
Maximum DC blocking voltage	100	200	400	600	800	1000	
Maximum average forward rectified current at $T_A = 50^\circ\text{C}$	1.5						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	40						
Maximum instantaneous forward voltage at 1.0A	1.0						V
Maximum DC reverse current at $T_A = 25^\circ\text{C}$ at rated DC blocking voltage at $T_A = 100^\circ\text{C}$	10 500						$\mu\text{A}$
Typical thermal resistance (Note) $R_{\theta JA}$ $R_{\theta JL}$	36 13						$^\circ\text{C/W}$
Operating temperature range $T_J$	-55 to +125						$^\circ\text{C}$
Storage temperature range $T_{STG}$	-55 to +150						

#### Note:

1. Thermal resistance from junction to ambient and from junction to lead mounted on PCB with 0.47 x 0.47" (12 x 12mm) copper pads.

### Ratings and Characteristic Curves

Figure 1 Maximum Non-Repetitive Forward Surge Current Per Bridge Element

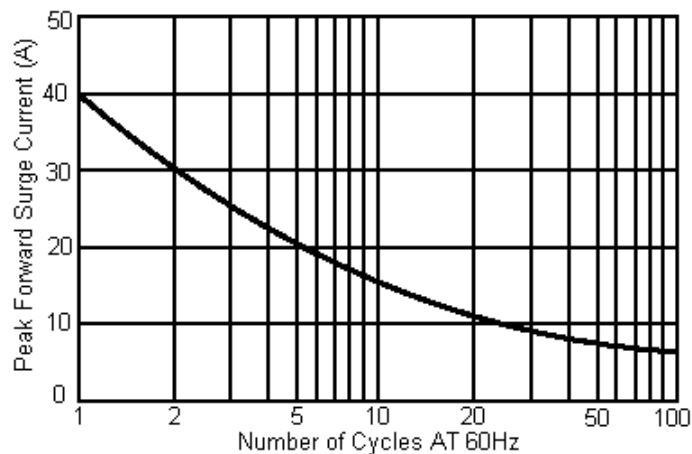
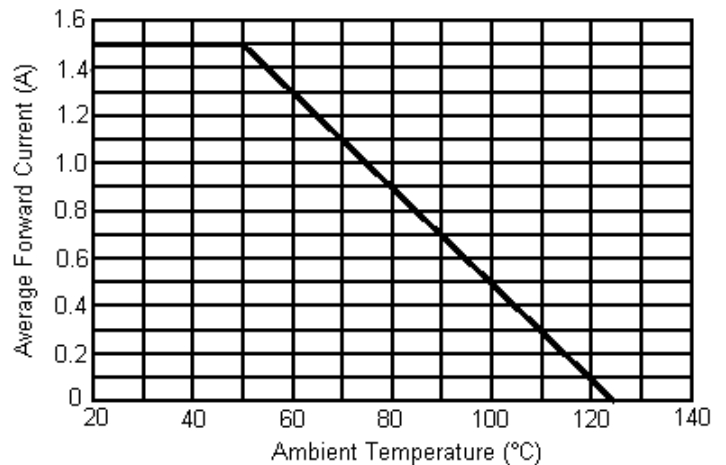


Figure 2 Maximum Forward Current Derating Curve



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Figure 3 Typical Instantaneous Forward Characteristics Per Bridge Element

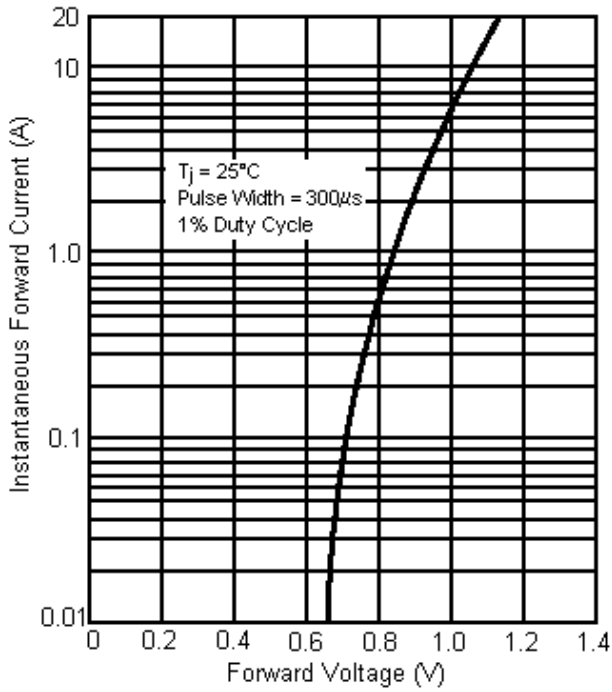
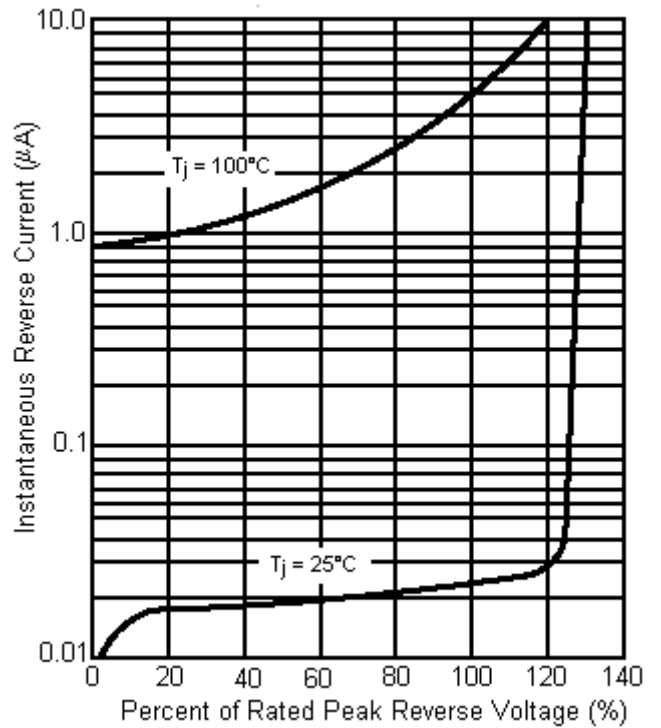


Figure 4 Typical Reverse Characteristics Per Bridge Element



### Specifications

$V_{RRM}$ (V)	Maximum Input Voltage (V ac)	Series	$I_{FSM}$ (A)	Part Number
100	70	W	40	W01
200	140			W02
400	280			W04
600	420			W06
800	560			W08
1000	700			W10

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### Notes:

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