

# W005 THRU W10

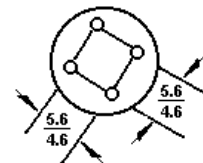
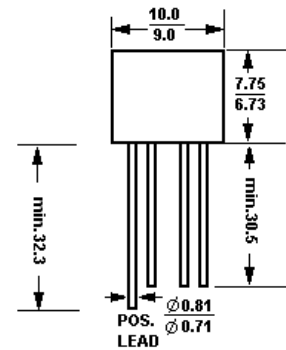
## 1.5A SINGLE-PHASE SILICON BRIDGE RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

Forward Current – 1.5 Amperes

### Features

- Surge overload rating – 50 amperes peak
- Ideal for printed circuit boards
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Mounting Position: Any

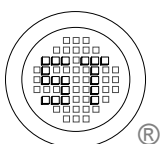


Dimensions in mm

### Absolute Maximum Ratings and Characteristics

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

	Symbols	W005	W01	W02	W04	W06	W08	W10	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	800	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A = 25^\circ\text{C}$	$I_{(AV)}$	1.5							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50							A
Rating for fusing ( $t < 8.35\text{ms}$ )	$I^2t$	5							$\text{A}^2\text{t}$
Maximum forward voltage drop per element at 1A peak	$V_F$	1							V
Maximum reverse current at rated $T_A = 25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
DC blocking voltage per element $T_A = 100^\circ\text{C}$		1.0							mA
Operating temperature range	$T_J$	-50 to +125							$^\circ\text{C}$
Storage temperature range	$T_A$	-50 to +150							$^\circ\text{C}$



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001  
Certificate No. 7116



ISO 9001 : 2000  
Certificate No. 000-100-00000

RATING AND CHARACTERISTICS CURVES

FIG. 1-MAXIMUM FORWARD SURGE CURRENT

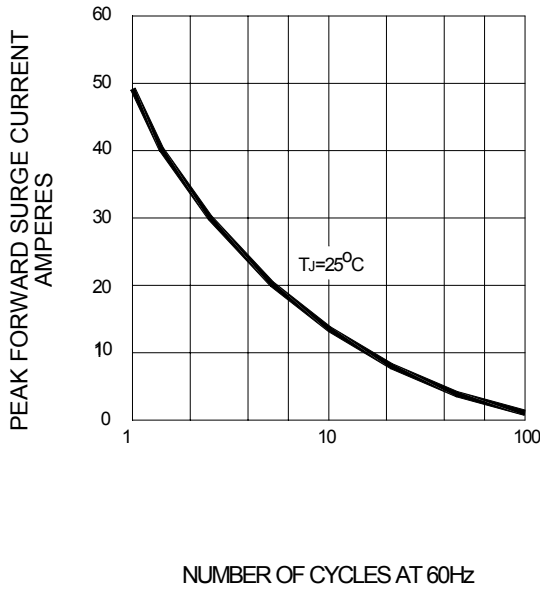


FIG. 2-DERATING CURVE  
OUTPUT RECTIFIED CURRENT

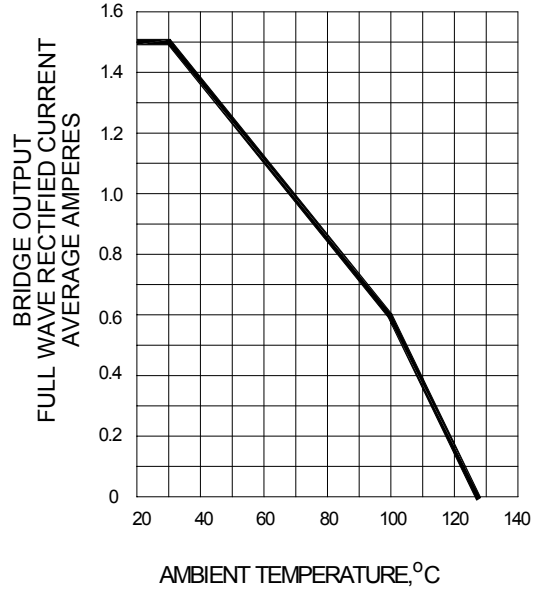


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

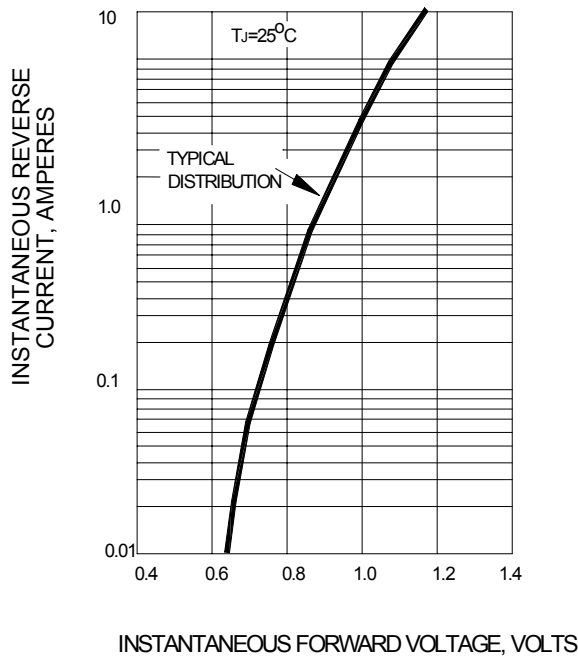
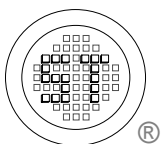
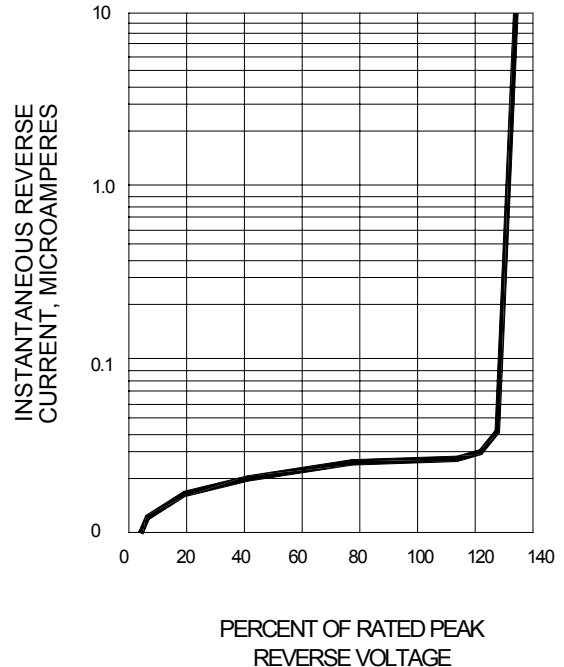


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



**SEMTECH ELECTRONICS LTD.**  
 (Subsidiary of Semtech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

