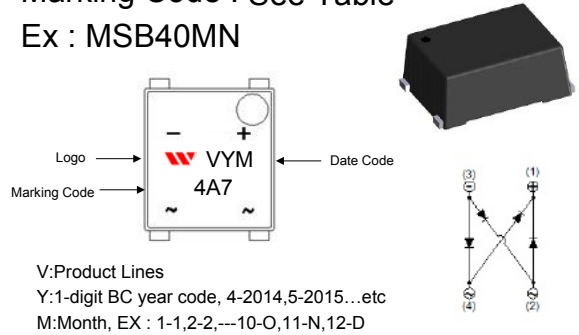


**4.0A Single Phase Glass passivated Bridge Rectifiers - 50V~1000V**

PRIMARY CHARACTERISTICS	
$V_{RRM}$	50V~1000V
$I_o$	4.0A
$V_F$	1.1V
$I^2T$	$A^2S$
$T_{J,Max}$	150°C

**MSBL PACKAGE**

Marking Code : See Table  
Ex : MSB40MN



**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop,high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin Pb/Sn copper
- Moisture Sensitivity Level 1

**MECHANICAL DATA**

- Case : Molded plastic,MSBL
- Polarity : Shown above
- Epoxy : UL94V-0 rated flame retardant

**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%

CHARACTERISTICS	SYMBOL	MSB40AN	MSB40BN	MSB40DN	MSB40GN	MSB40JN	MSB40KN	MSB40MN	UNIT
Marking Code		4A1	4A2	4A3	4A4	4A5	4A6	4A7	
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	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=40^\circ C$	$I_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC .Method)	$I_{FSM}$	4.0							A
Maximum Forward Voltage at 4.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current @ $T_J=25^\circ C$ at Rated DC Blocking Voltage @ $T_J=125^\circ C$	$I_R$	10 500							$\mu A$
$I^2t$ Rating for Fusing ( $t<8.3ms$ )	$I^2t$	4.0							$A^2s$
Operating Temperature Range	$T_J$	-55 to +150							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

Note:1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance from junction to ambient mounted on P.C.B with 0.5\*0.5"(13\*13mm) copper pads.

**4.0A Single Phase Glass passivated Bridge Rectifiers - 50V~1000V**

FIG.1-FORWARD DERATING CURRENT

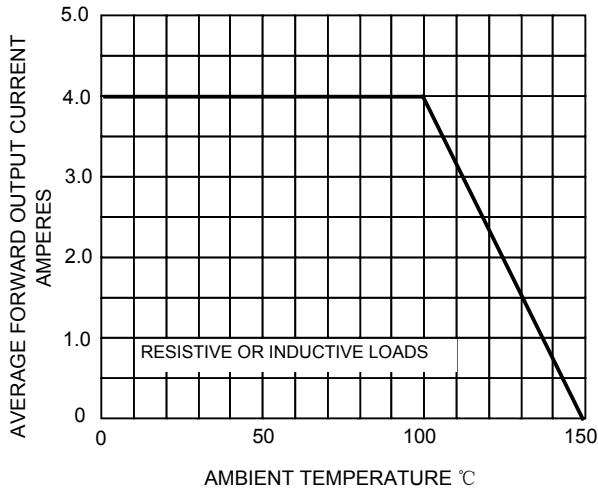


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

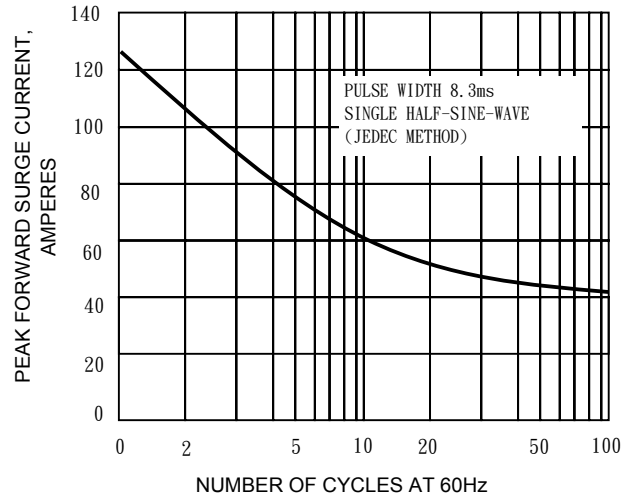


FIG.3-TYPICAL FORWARD CHARACTERISTICS

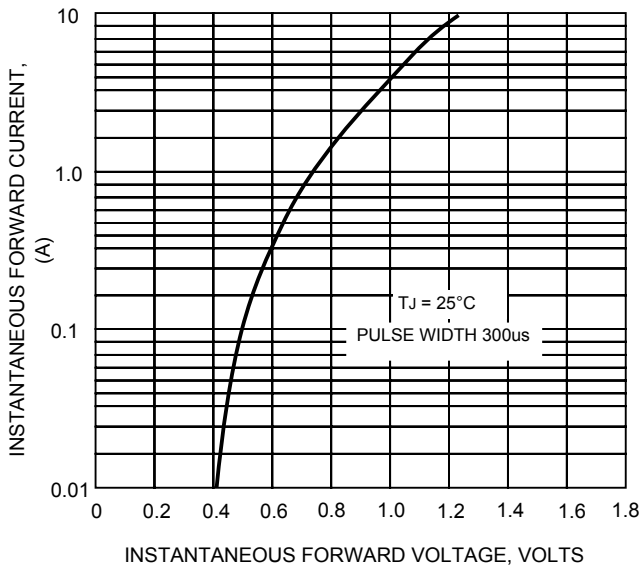
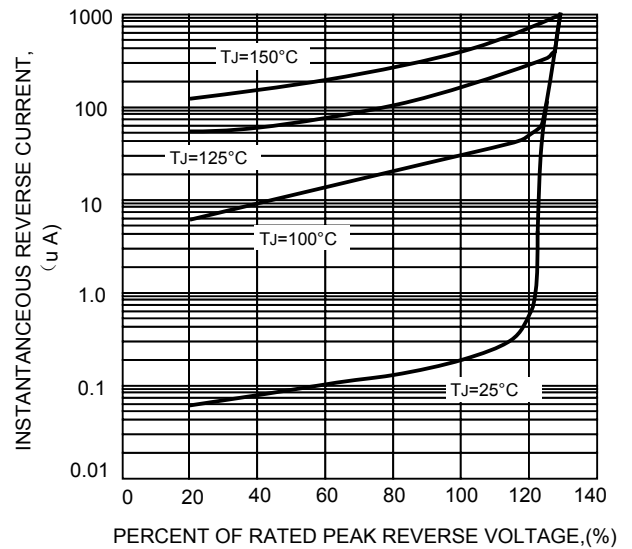
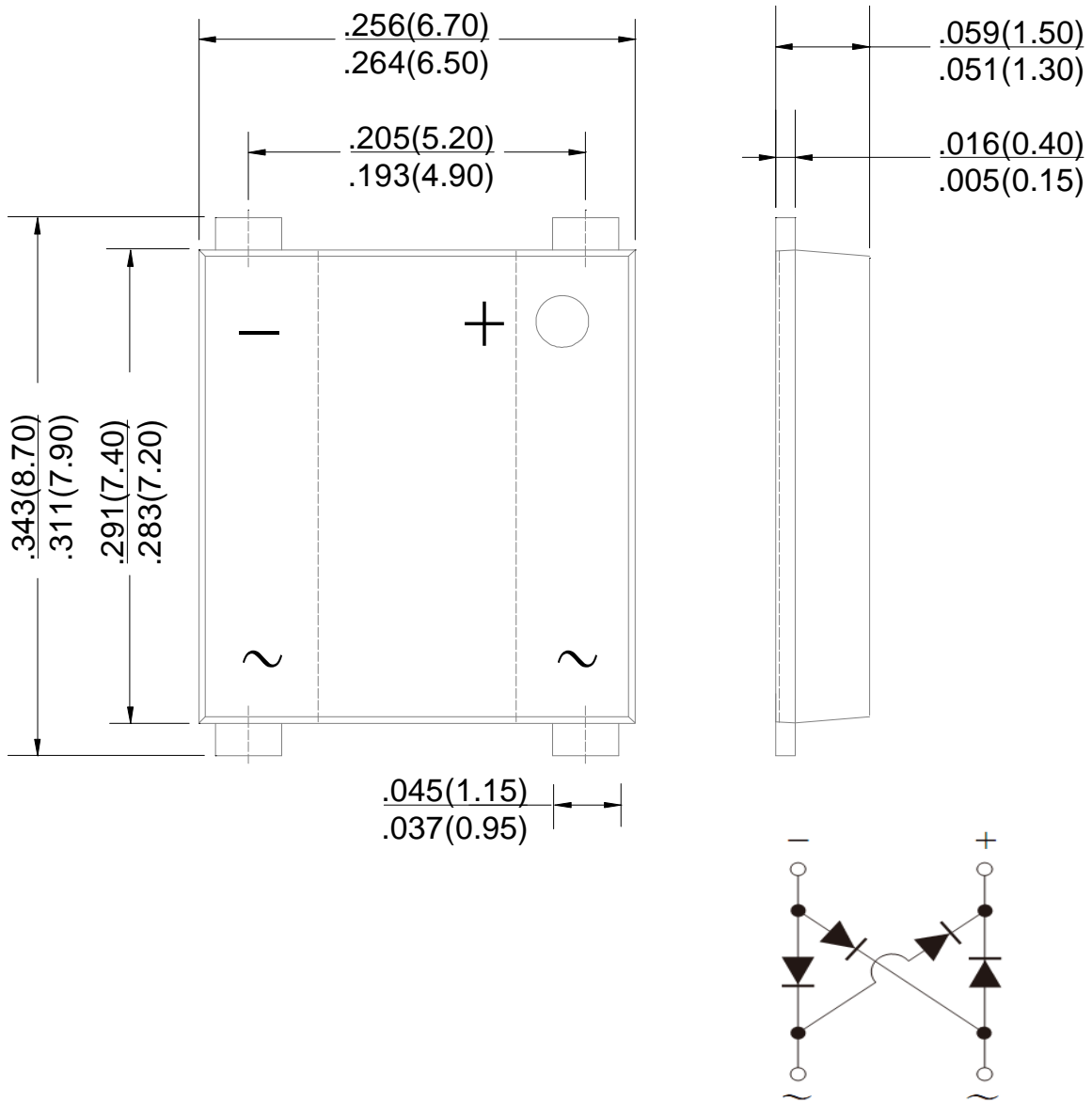


FIG.4-TYPICAL REVERSE CHARACTERISTICS



# Outline Drawing

# MSBL



Dimensions in inches and (millimeters)

Rev.A

**Ordering Information:**

Device PN	Packing
Part Number -T <sup>(1)</sup> G <sup>(2)</sup> -WS <sup>(3)</sup>	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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