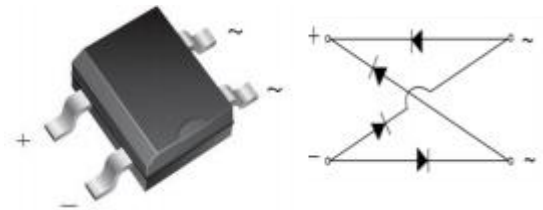


## Reverse Voltage 200~1000V Output Current 1A

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junctions
- Saves space on printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds
- Add suffix "E" for Halogen Free



MBS

### Typical Applications

- General purpose use in ac-to-dc bridge full wave rectification for TV, Monitor, SMPS, Adapter, Printer, Audio equipment, and Home Applications application

### Mechanical Data

- Case: MBS Molded plastic body over passivated junctions
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Mounting Position: Any

### Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbol	MF2S	MF4S	MF6S	MF8S	MF10S	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Average forward rectified output current <sup>(1)</sup>	$I_{F(AV)}$	1.0					A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	40					A
Rating for fusing ( $t \leq 8.3ms$ )	$I^2t$	7					A <sup>2</sup> s
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to 150					°C
Typical junction capacitance per at 4.0V, 1.0MHz	$C_j$	13					pF

## Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	MF2S	MF4S	MF6S	MF8S	MF10S	Unit
Maximum instantaneous forward voltage	$I_F=1A$	$V_F$			1.1			Volts
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^{\circ}C$	$I_R$			5.0			$\mu A$
	$T_A=125^{\circ}C$				100			
Typical thermal resistance <sup>(1)</sup>		$R_{\theta JA}$			85 <sup>(1)</sup>			$^{\circ}C/W$
		$R_{\theta JA}$			70 <sup>(2)</sup>			
		$R_{\theta JL}$			20 <sup>(1)</sup>			

Note:1. On glass epoxy P.C.B. mounted on 0.05×0.05"(1.3×1.3mm) pads

2. On aluminum substrate P.C.B. with an area of 0.8×0.8" (20×20mm) mounted on 0.05×0.05"(1.3×1.3mm) solder pad

## Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

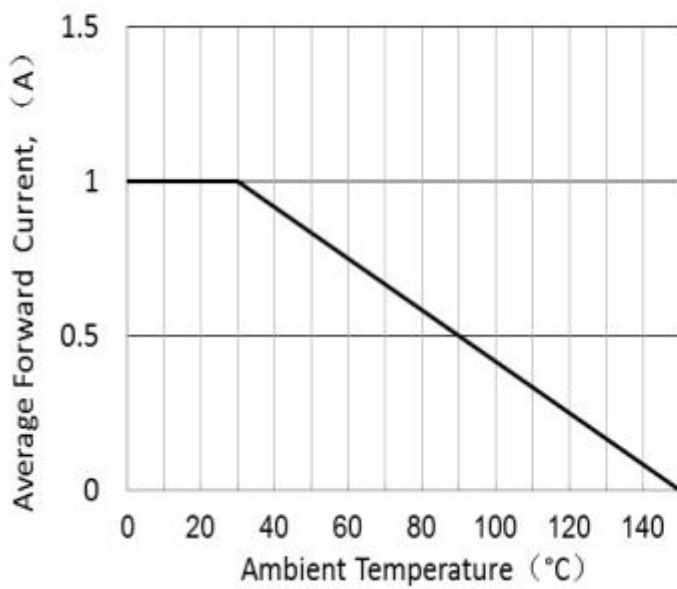


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

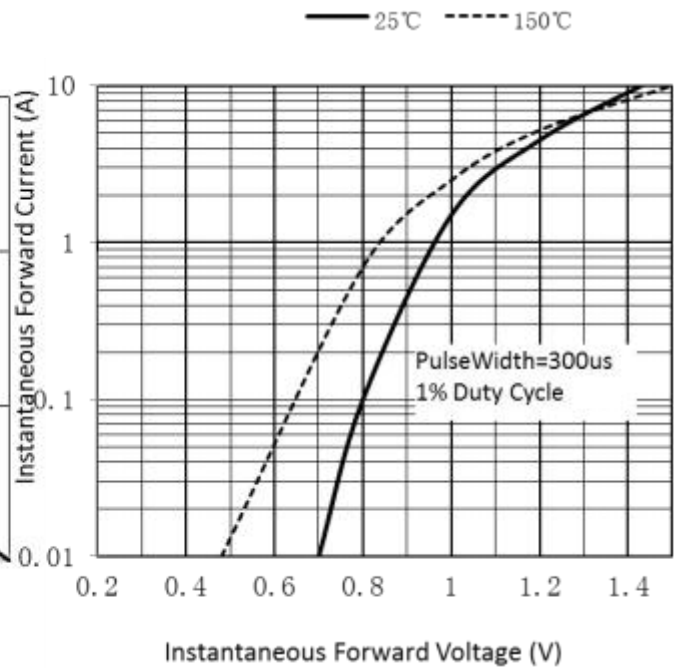


FIG.3 TYPICAL RESERVE LEAKAGE CHARACTERISTICS PER DIODE

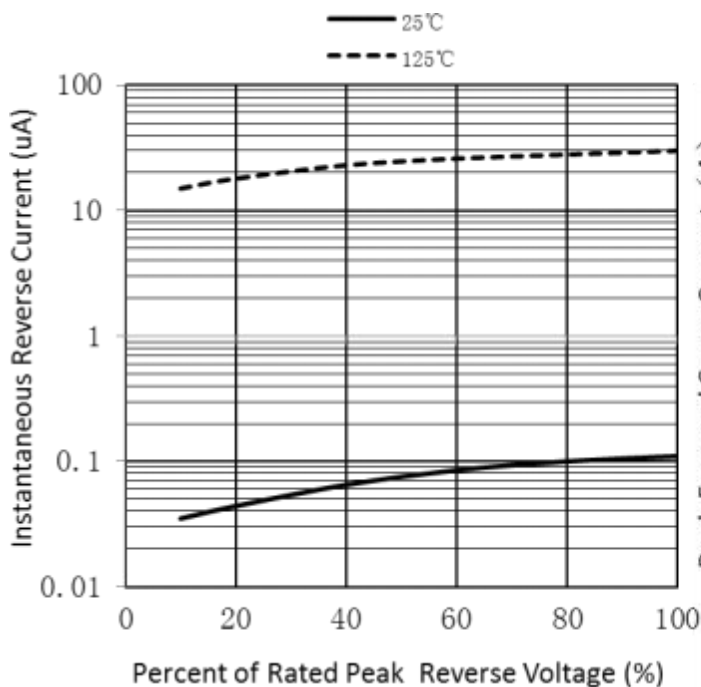
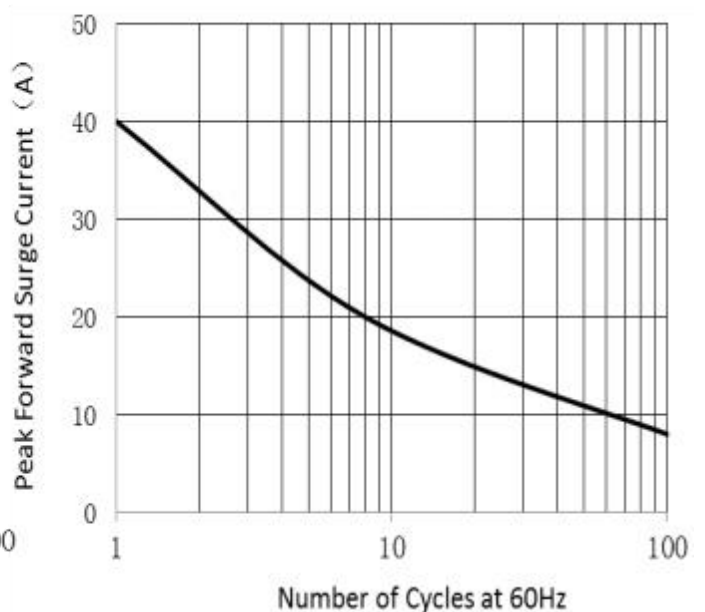


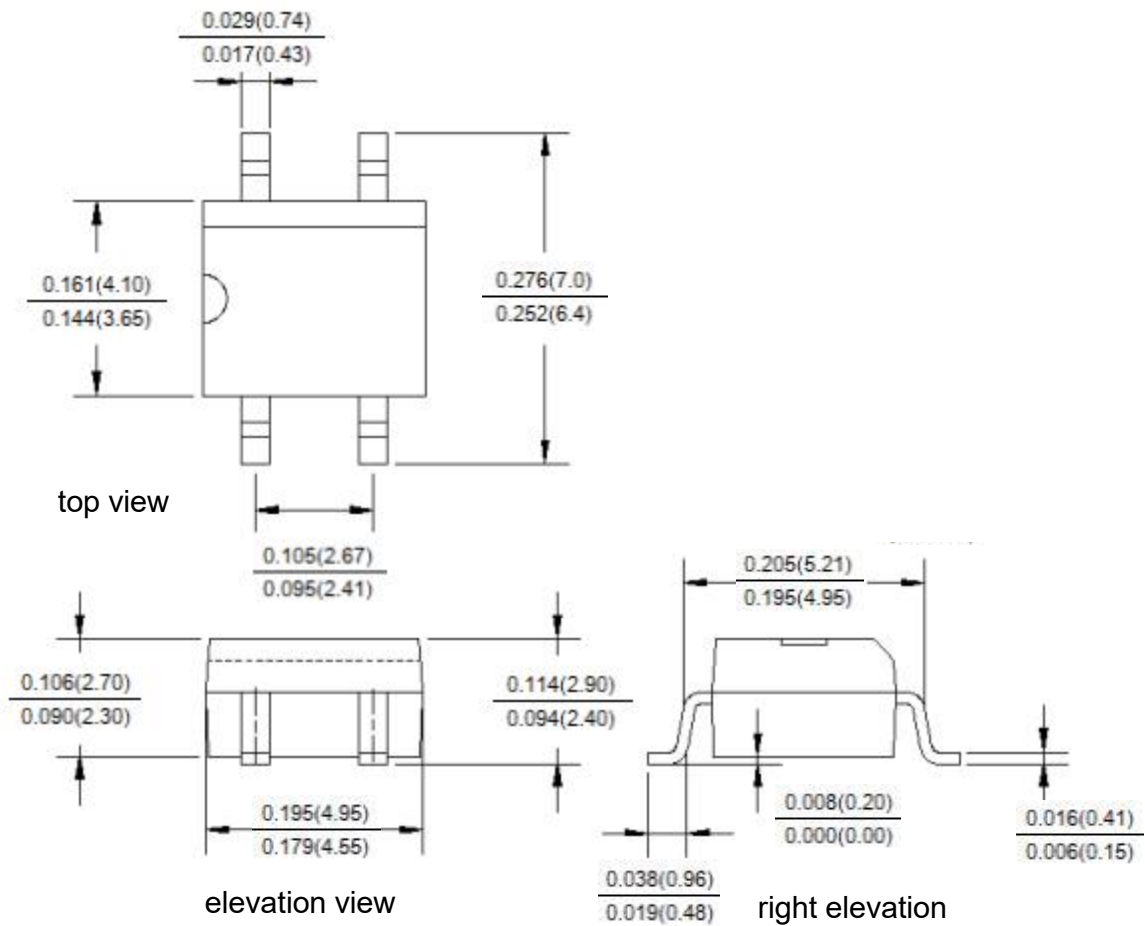
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SUGER CURRENT



## Package Outline Dimensions

Unit: inches(mm)

First angle projection



## Revision History

Document Version	Date of release	Discription of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/8	Modify document format

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