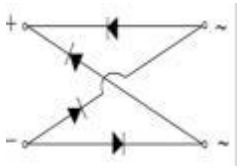
Reverse Voltage 200~1000V Ountput Current 0.5A

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: 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	MB2S	MB4S	MB6S	MB8S	MB10S	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 (1)	On Glass-epoxy P.C.B	$I_{F(AV)}$	0.5(1)					A
	On aluminum substrate		0.8(2)					
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	35					A
Rating for fusing (t≤8.3ms)		I^2t	5					A^2s
Operating junction and storage temperature range		T_J, T_{STG}	-55 to 150					°C
Typical junction capacitance per at 4.0V, 1.0MHz		Cj	13					pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	**Test Conditions**	**Symbol**	**MB2S**	**MB4S**	**MB6S**	**MB8S**	**MB10S**	**Unit**
Maximum instantaneous forward voltage	I_F=0.4A	V_F	1.0					Volts
Maximum DC reverse current at rated DC blocking voltage	T_A=25°C	I_R	5.0					μA
	T_A=125°C		100					
Typical thermal resistance(1)		$R_{\theta JA}$	85(1)					°C/W
		$R_{\theta JA}$	70(2)					
		$R_{\theta JL}$	20(1)					

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.whthan 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

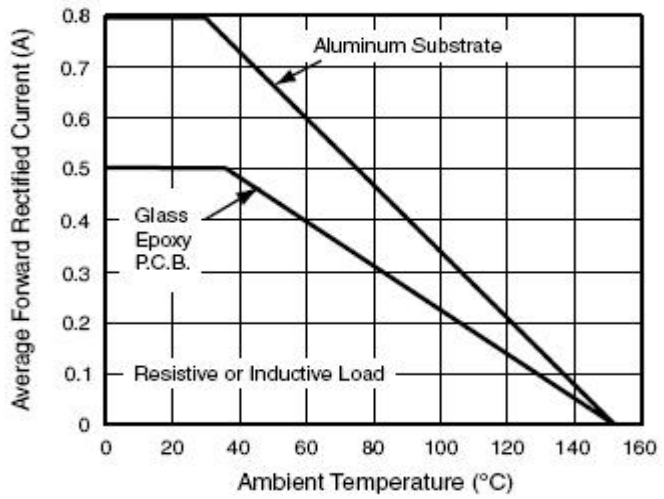


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

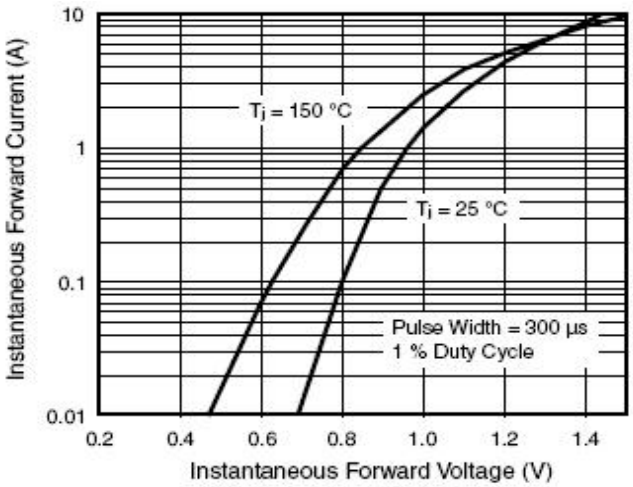


FIG.3 TYPICAL RESERVE LEAKAGE CHARACTERISTICS PER DIODE

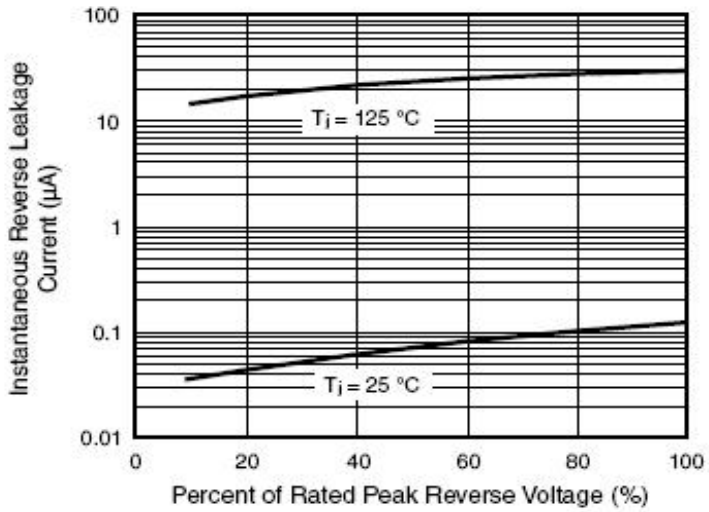
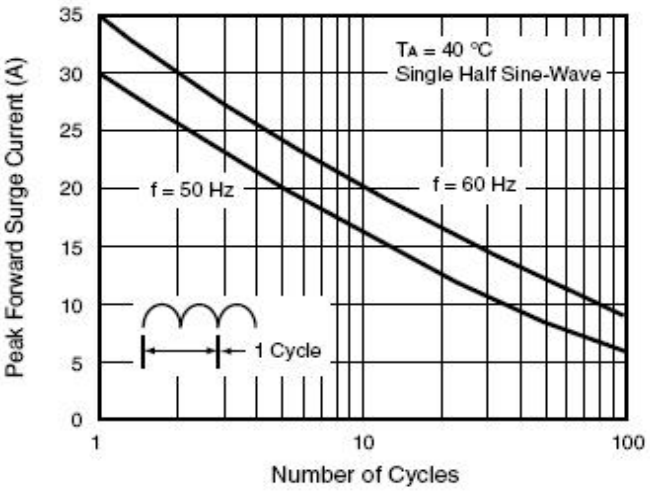


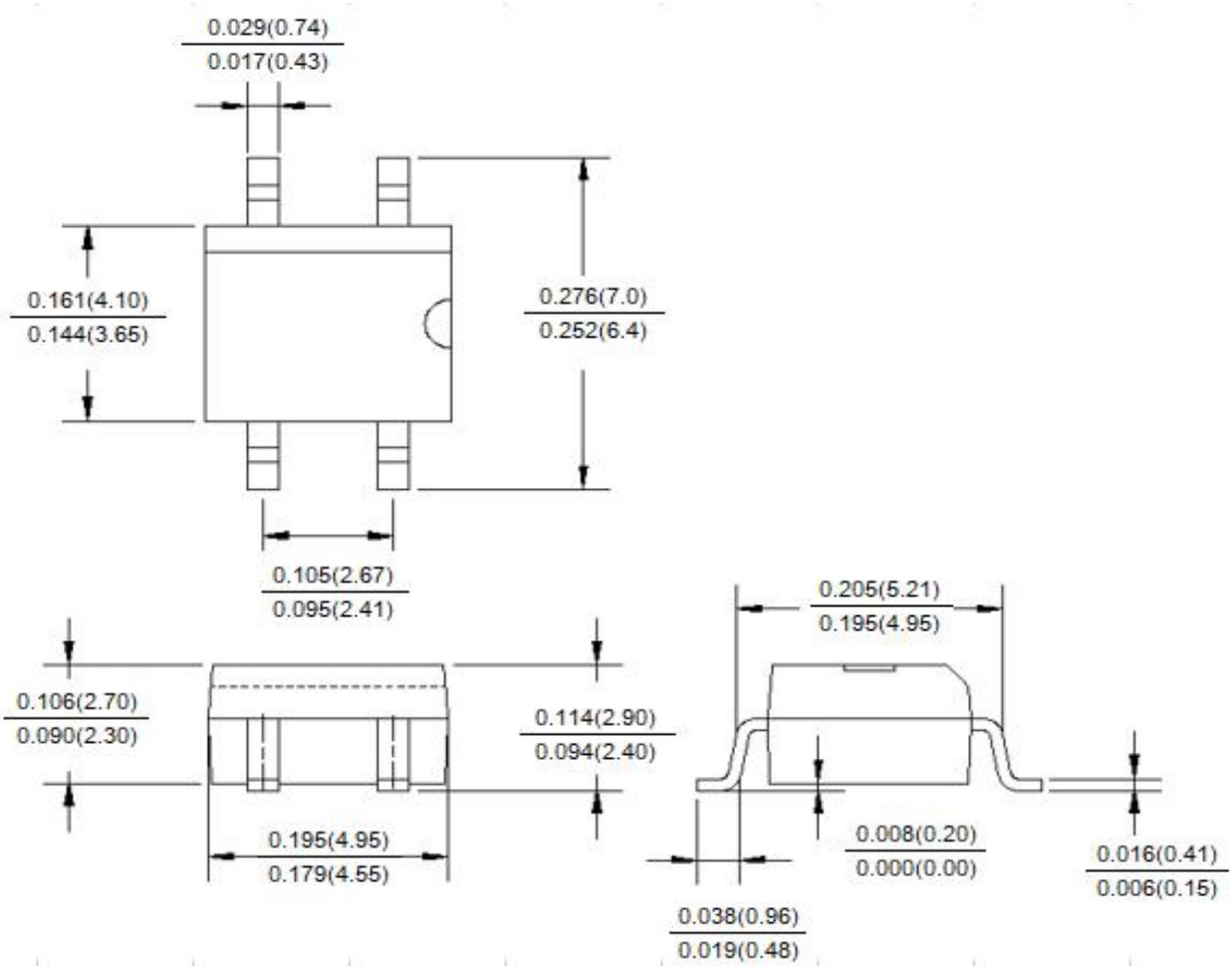
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



Package Outline Dimensions

Unit:inches(mm)

First angle projection



elevation view

right elevation

Revision History

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

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