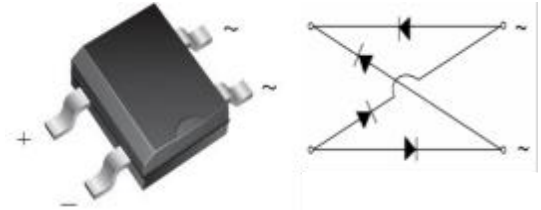


Reverse Voltage 100~600V Ooutput Current 0.5A

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	U05B4B48	U05G4B48	U05J4B48	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	400	600	V
Maximum RMS voltage	V_{RMS}	70	280	420	V
Maximum DC blocking voltage	V_{DC}	100	400	600	V
Average forward rectified output current ⁽¹⁾	On Glass-epoxy P.C.B	$0.5^{(1)}$			A
	On aluminum substrate	$0.8^{(2)}$			
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	33			A
Rating for fusing ($t \leq 8.3ms$)	I^2t	4.54			A ² 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	U05B4B48	U05G4B48	U05J4B48	Unit
Maximum instantaneous forward voltage	$I_F=0.4A$	V_F		1.0		Volts
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^{\circ}C$	I_R		5.0		μA
	$T_A=125^{\circ}C$			100		
Typical thermal resistance ⁽¹⁾		$R_{\theta JA}$		85 ⁽¹⁾		$^{\circ}C/W$
		$R_{\theta JA}$		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. 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

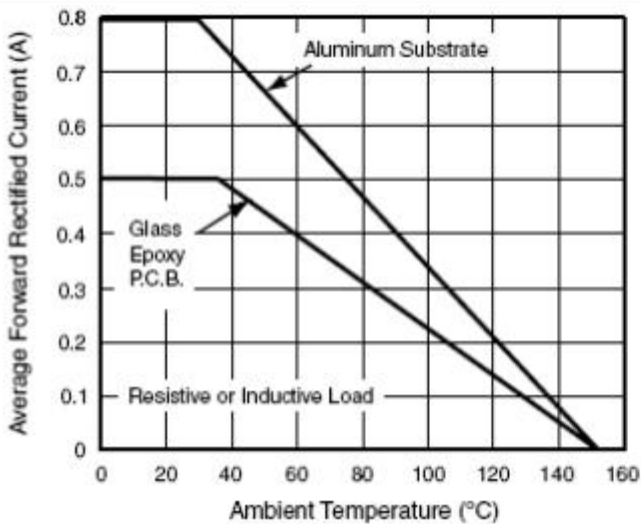


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

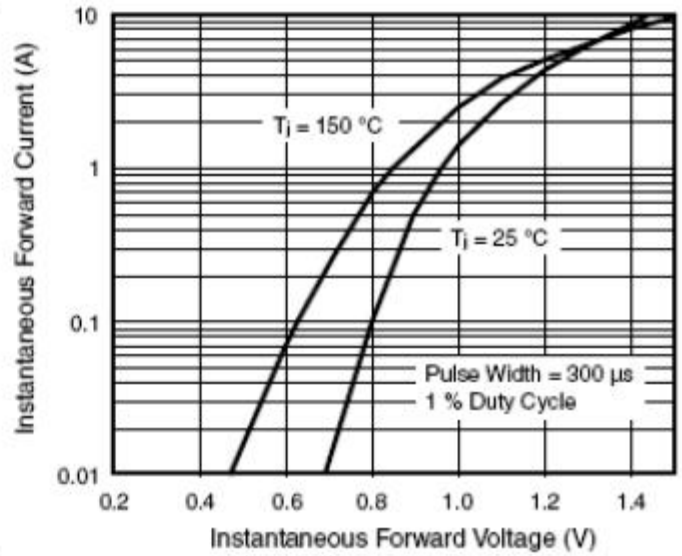


FIG.3 TYPICAL RESERVE LEAKAGE CHARACTERISTICS PER DIODE

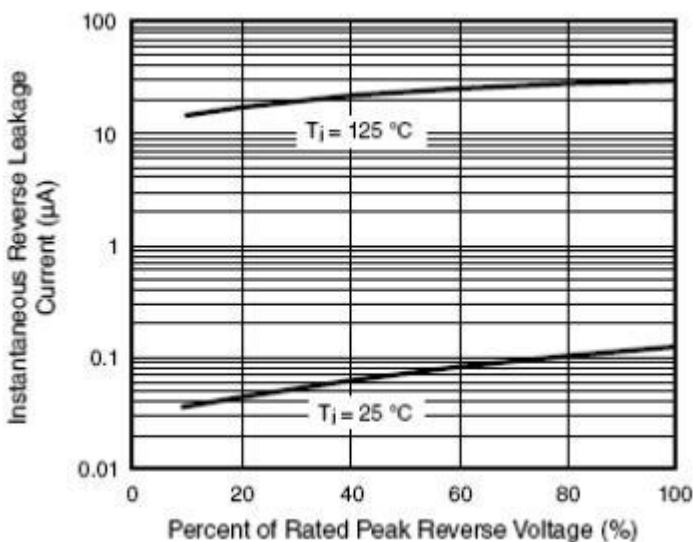
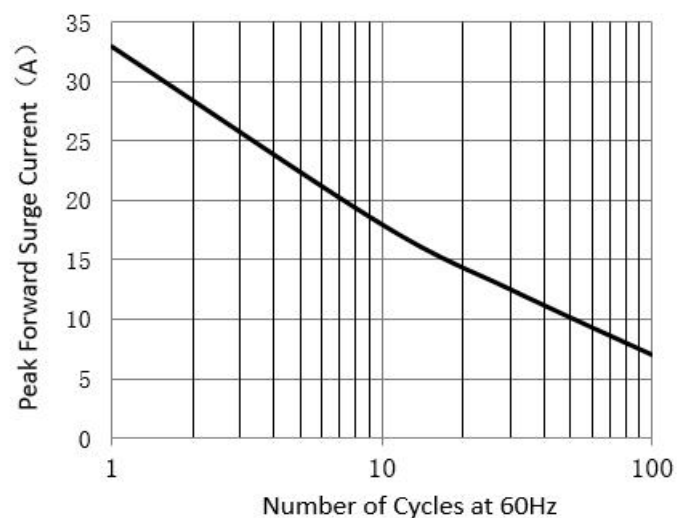


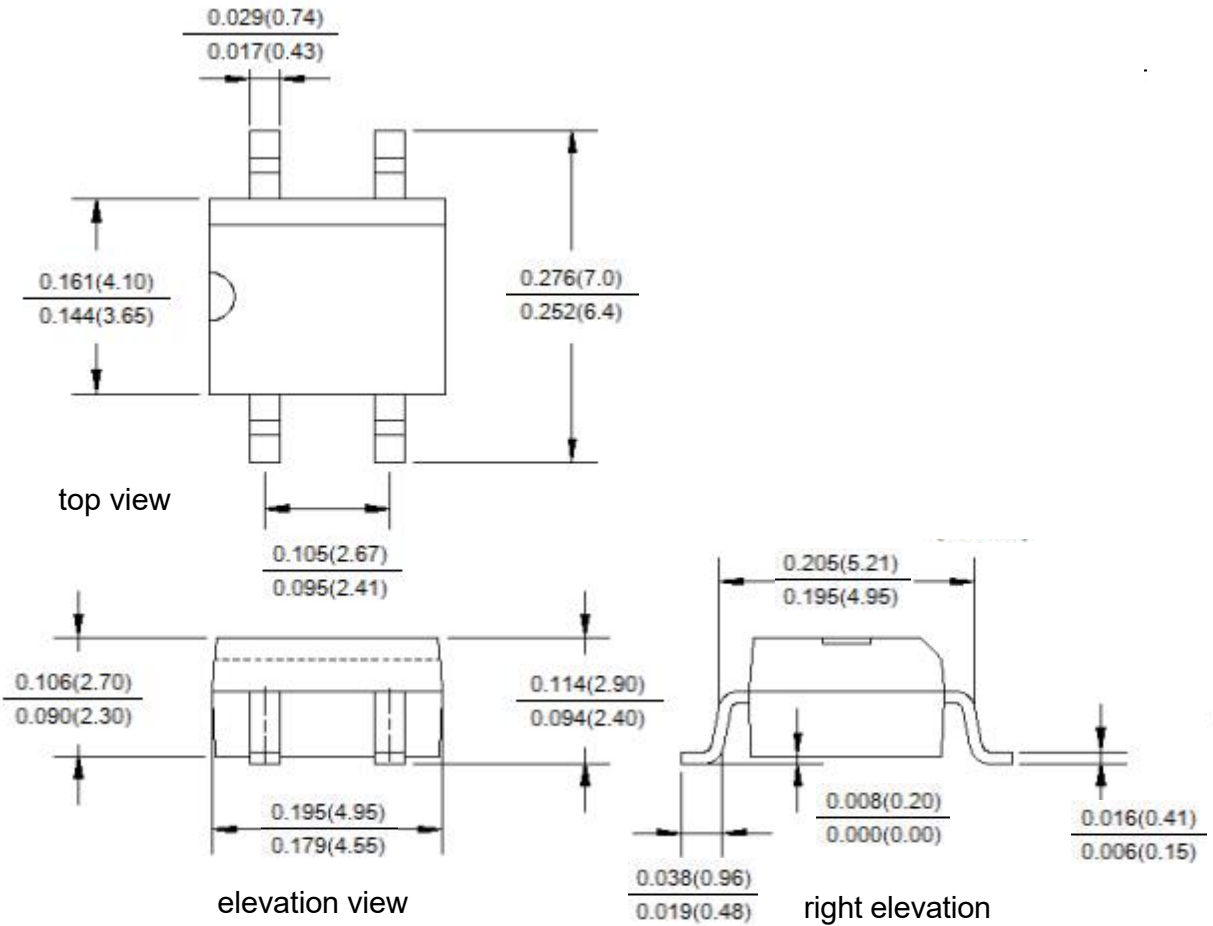
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



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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