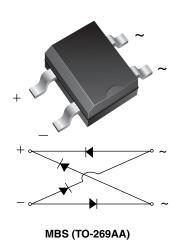


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Miniature Glass Passivated Single-Phase Surface-Mount Bridge Rectifier



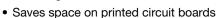
LINKS TO ADDITIONAL RESOURCES



PRIMARY CHARACTERISTICS					
I _{F(AV)}	0.5 A				
V _{RRM}	200 V, 400 V, 600 V				
I _{FSM}	30 A				
I _R	5 µA				
V_F at $I_F = 0.5$ A	1.0 V				
T _J max.	150 °C				
Package	MBS (TO-269AA)				
Circuit configuration	Quad				

FEATURES

• UL recognition, file number E54214



RoHS

• Ideal for automated placement

· Middle surge current capability

 \bullet Meets MSL level 1, per J-STD-020, LF maximum peak of 260 $^{\circ}\text{C}$

 Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for power supply, lighting ballaster, battery charger, home appliances, office equipment, and telecommunication applications.

MECHANICAL DATA

Case: MBS (TO-269AA)

Molding compound meets UL 94 V-0 flammability rating

Base P/N-E3 - RoHS-compliant, commercial grade

Terminals: matte tin plated leads, solderable per

J-STD-002 and JESD22-B102

E3 suffix meets JESD 201 class 1A whisker test

Polarity: as marked on body

PARAMETER	SYMBOL	B2S	B4S	B6S	UNIT
Device marking code		B2	В4	В6	
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward output rectified current on glass-epoxy PCB (fig. 1)	I _{F(AV)}	0.5 (1)			Α
Peak forward surge current 10 ms single half sine-wave superimposed on rated load	I _{FSM}	30			А
Rating for fusing (t < 8.3 ms)	l ² t	5.0			A ² s
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150			°C

Note

⁽¹⁾ On glass epoxy PCB mounted on 0.05" x 0.05" (1.3 mm x 1.3 mm) pads



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ELECTRICAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)						
PARAMETER	TEST CONDITIONS	SYMBOL	VALUES	UNIT		
Maximum instantaneous forward voltage per diode	I _F = 0.5 A	V_{F}	1.0	V		
Maximum DC reverse current at rated DC blocking voltage per diode	T _A = 25 °C	- I _R	5.0	μΑ		
Maximum DC reverse current at rated DC blocking voltage per diode	T _A = 125 °C		100			
Typical junction capacitance per diode	4.0 V, 1 MHz	CJ	13	pF		

THERMAL CHARACTERISTICS (T _A = 25 °C unless otherwise noted)					
PARAMETER	SYMBOL	L B2S B4S B6S U			
Typical thermal resistance (1)	$R_{\theta JA}$	90			°C/W
Typical thermal resistance (*)	$R_{\theta JL}$	40			

Note

 $^{^{(1)}}$ On glass epoxy PCB mounted on 0.05" x 0.05" (1.3 mm x 1.3 mm) pads

ORDERING INFORMATION (Example)						
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE		
B2S-E3/80	0.22	80	3000	13" diameter paper tape and reel		

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

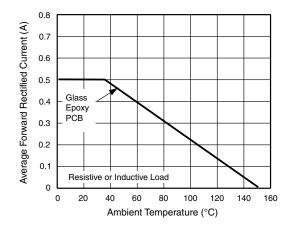


Fig. 1 - Derating Curve for Output Rectified Current

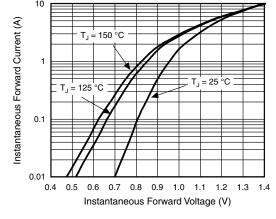


Fig. 3 - Typical Forward Voltage Characteristics Per Diode

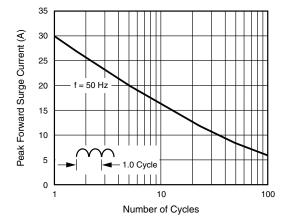


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

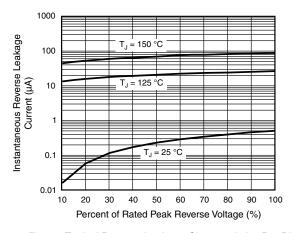


Fig. 4 - Typical Reverse Leakage Characteristics Per Diode



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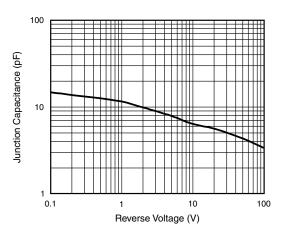
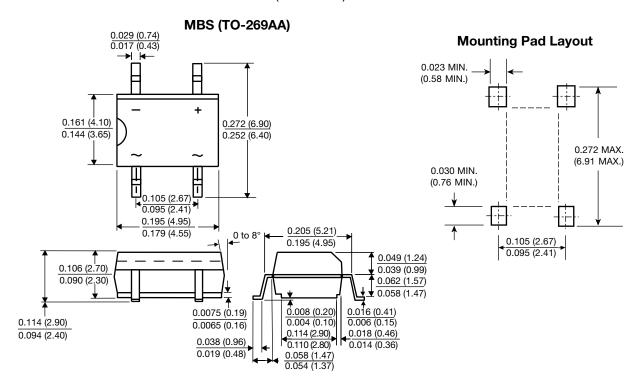


Fig. 5 - Typical Junction Capacitance Per Diode

PACKAGE OUTLINE DIMENSIONS in inches (millimeters)





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