



## DESCRIPTION

The S1ZB60 is available in TO-269AA package.

## ORDERING INFORMATION

Package Type	Part Number
TO-269AA	S1ZB60
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- This series is UL recognized under Component Index, file number E54214
- Glass passivated chip junctions
- High surge overload rating: 35A peak
- Saves space on printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension
- Available in TO-269AA package

## MECHANICAL DATA

Case: Molded plastic body over passivated junctions

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on body

Mounting Position: Any

Weight: 0.0078 ounce, 0.22 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		$V_{RRM}$	600	V
Maximum RMS Voltage		$V_{RMS}$	420	V
Maximum DC blocking voltage		$V_{DC}$	600	V
Maximum Average Forward Rectified Current At $T_A=30^\circ\text{C}$		$I_{(AV)}$	0.5	A
On Glass-Epoxy P.C.B <sup>NOTE1</sup>				
On Aluminum Substrate <sup>NOTE2</sup>				
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load (JEDEC Method)		$I_{FSM}$	35.0	A
Rating for Fusing ( $t < 8.3\text{ms}$ )		$I^2t$	5.0	A <sup>2</sup> sec
Maximum Instantaneous Forward Voltage Drop Per Leg at 0.4A		$V_F$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Leg	$T_A=25^\circ\text{C}$	$I_R$	5.0	uA
	$T_A=125^\circ\text{C}$		100	
Typical Junction Capacitance Per Leg <sup>NOTE3</sup>		$C_J$	13.0	pF
Typical Thermal Resistance Per Leg	NOTE1	$R_{\theta JA}$	85.0	°C/W
	NOTE2	$R_{\theta JA}$	70.0	
	NOTE1	$R_{\theta JL}$	20.0	
Operating Junction and Storage Temperature Range		$T_J, T_{STG}$	-55 to +150	°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1: On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

NOTE2: On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

NOTE3: Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts



## TYPICAL CHARACTERISTICS

Figure1. Derating Curve for Output Rectified Current

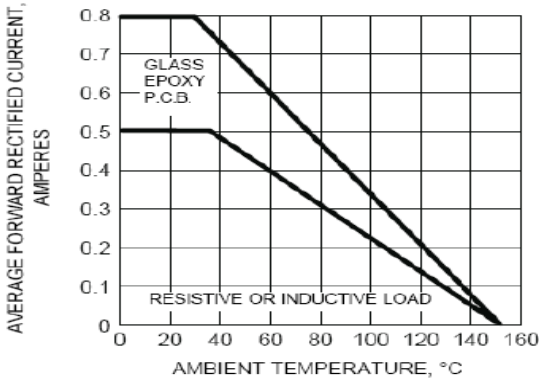


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

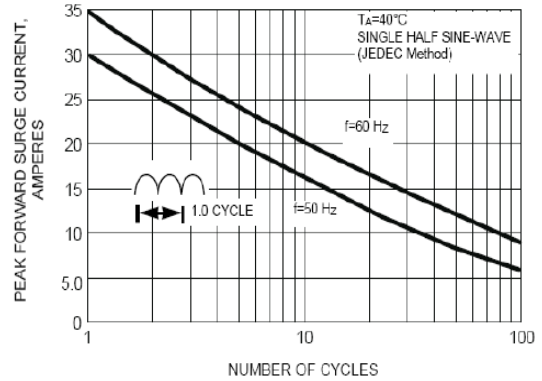


Figure3. Typical Forward Voltage Characteristics Per Leg

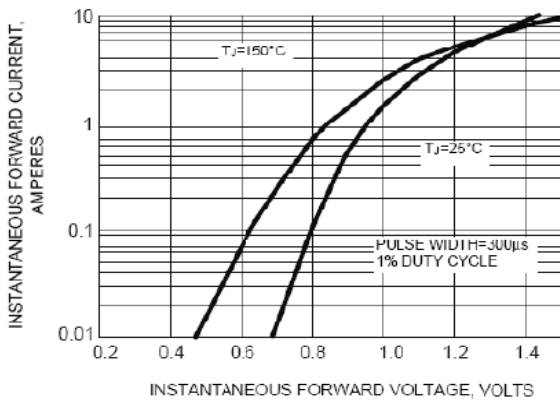


Figure4. Typical Reverse Leakage Characteristics Per Leg

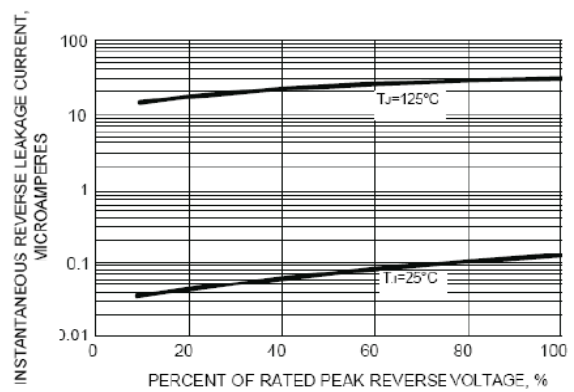
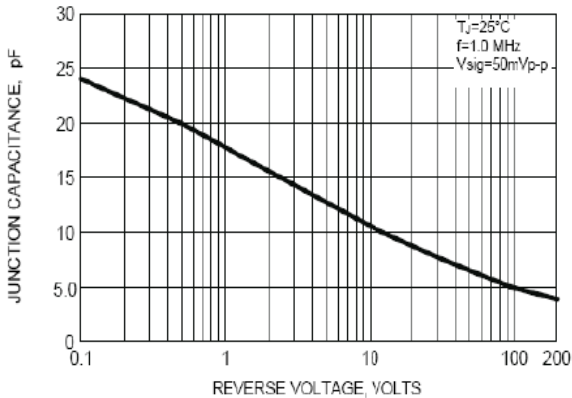


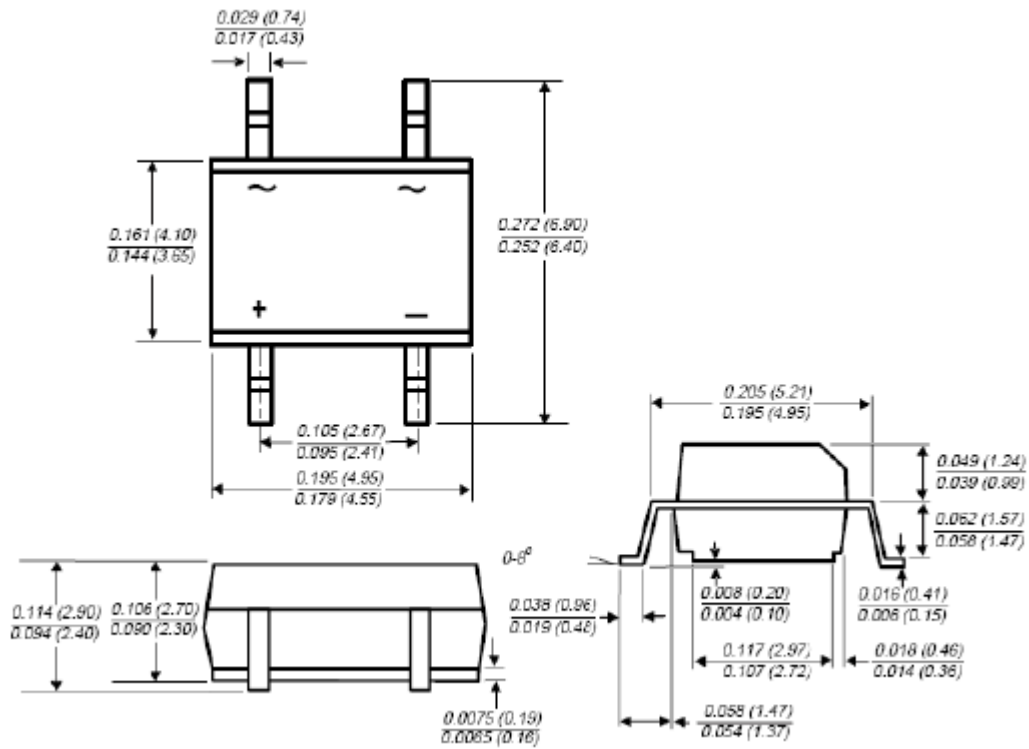
Figure5. Typical Junction Capacitance Per Leg





## PACKAGE INFORMATION

Dimension in TO-269AA Package (Unit: mm)





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