

CURRENT 50 Ampere  
 VOLTAGE RANG 50~1000 Volts

## S50VB005 THRU S50VB100

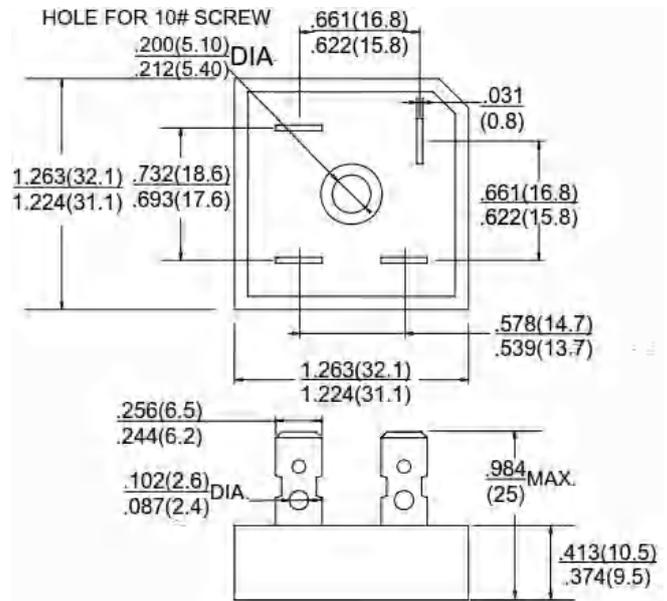
### S- VB

#### FEATURES

This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902  
 Rating to 1000V PRV  
 High efficiency  
 Glass passivated chip junction  
 Electrically isolated metal case for maximum heat Dissipation  
 The plastic material has UL flammability classification 94V-0  
 Electrically isolated base-2500 VIots

#### MECHANICAL DATA

Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation  
 Polarity : As marked on Body  
 Mounting : Hole for # 10 screw  
 Weight : 0.70 ounces , 20 grams (terminal)



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified ,  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load derate current by 20%

PARAMETER	SYMBOL	S50VB 005	S50VB 10	S50VB 20	S50VB 40	S50VB 60	S50VB 80	S50VB 100	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	v
Maximum RMS Voltage	$V_{RRM}$	35	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	v
Maximum Average Forward Rectified Current @ $T_c=T_a$	$I_{(AV)}$	50.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	$I_{FSM}$	450							A
Maximum Forward Voltage at 25A DC	$V_F$	1.1							v
Maximum DC Reverse Current @ $T_J=25^\circ C$ atrated DC blocking voltage @ $T_J=125^\circ C$	$I_R$	5.0							$\mu A$
$I^2t$ Rating for Fusing( $t<8.3ms$ ), (Note 1)	$I^2t$	800							$A^2S$
Typical Junction Capacitance per element (Note 2)	$C_J$	150							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

1-Measured at non-repetitive, for greater than 1ms and less than 8.3ms

2- Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

CURRENT 50 Ampere  
 VOLTAGE RANG 50~1000 Volts

**S50VB005 THRU S50VB100**

**Rating and Characteristic Curves (TA=25°C Unless otherwise noted)**

