

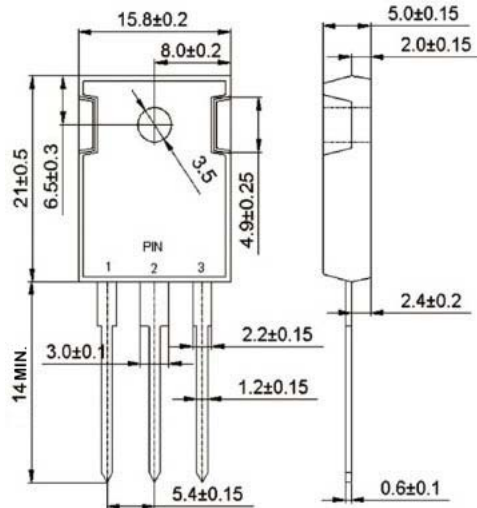
#### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

#### Mechanical Data

- Case: TO-247AD/TO-3P, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version**

TO-247AD/TO-3P



#### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	SB 3040 PT	SB 3045 PT	SB 3050 PT	SB 3060 PT	SB 30100 PT	SB 30150 PT	SB 30200 PT	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	45	50	60	100	150	200	V	
Working Peak Reverse Voltage	$V_{RWM}$									
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	28	31	35	42	70	105	140	V	
Average Rectified Output Current @ $T_L = 75^\circ\text{C}$ (Note 1)	$I_O$	30							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	275							A	
Forward Voltage @ $I_F = 15\text{A}$	$V_{FM}$	0.70		0.75		0.80		0.90	V	
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_{RM}$	0.2							20	mA
Typical Junction Capacitance (Note 2)	$C_j$	350		280			200		pF	
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	3.0				2.0			$^\circ\text{C/W}$	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150							$^\circ\text{C}$	

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

# Zibo Seno Electronic Engineering Co., Ltd.



## SB3040PT – SB30200PT

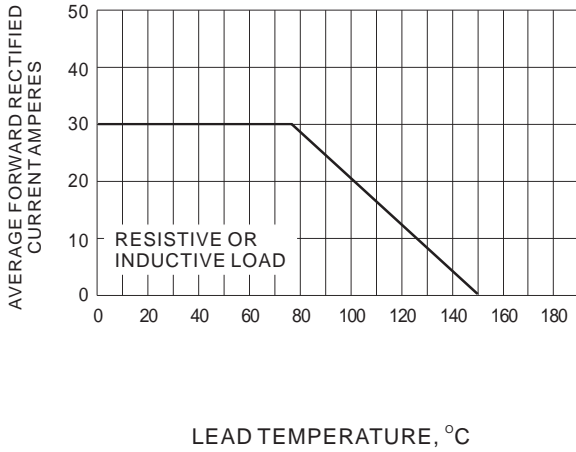


Fig.1- FORWARD CURRENT DERATING CURVE

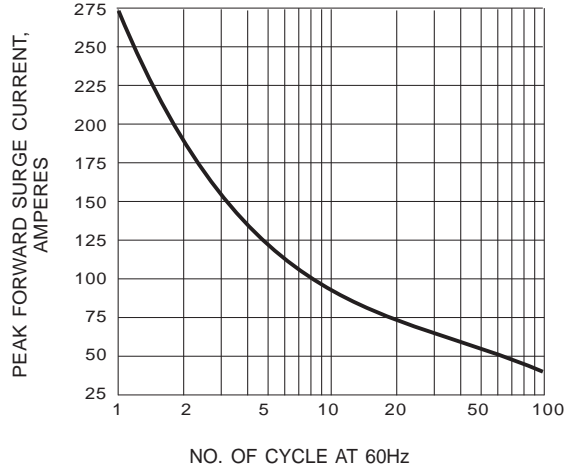


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

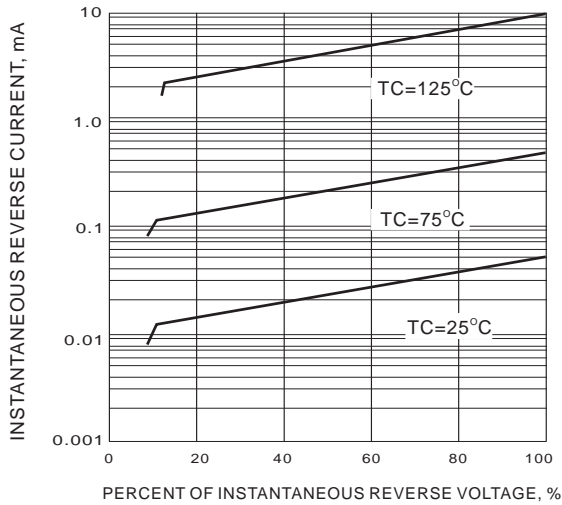


Fig.3- TYPICAL REVERSE CHARACTERISTIC

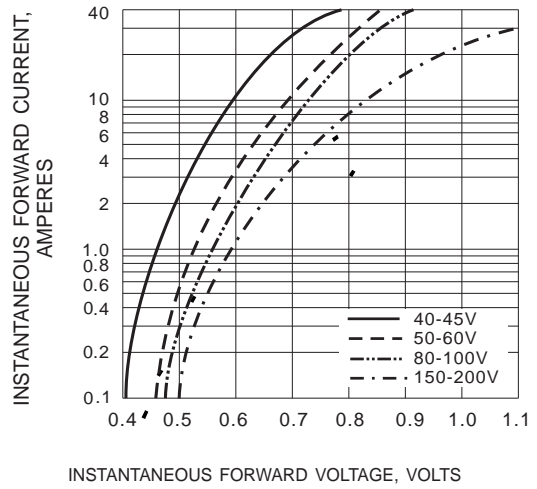


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC