

## SB320 THRU SB3100 3.0AMP. Schottky Barrier Rectifier

VOLTAGE:20 TO 100V

CURRENT:3.0A



### Specification Features:

- Case: Epoxy, Molded
- Weight:1.2Gram (Approximately)
- High current capability,Low Forward Voltage Drop
- High surge current capability
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed:  
260°C Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant
- Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM



SB3XX : Device Name SB320- SB3100  
KEL : KEL Logo

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	SB 320	SB 330	SB 340	SB 350	SB 360	SB 380	SB 3100	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	V
Maximum DC Blocking Voltage	$V_R$	20	30	40	50	60	80	100	V
Maximum Average Forward Rectifier Current. (0.375" Lead Length @ $T_A=75^\circ\text{C}$ )	$I_{F(AV)}$	3.0							A
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	$I_{FSM}$	80							A
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +125							$^\circ\text{C}$
Thermal Resistance (Note 1) (Junction to Ambient)	$R_{\theta JA}$	30							$^\circ\text{C/W}$

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Parameter	Symbol	SB 320	SB 330	SB 340	SB 350	SB 360	SB 380	SB 3100	Units	
Maximum D.C Reverse Current At Rated D.C Blocking Voltage @ $T_A=25^\circ\text{C}$ @ $T_A=100^\circ\text{C}$	$I_R$					1.0 30.0				mA
Forward Voltage @3A	$V_F$	0.550			0.750		0.850		V	
Total Capacitance @ $V_R=4V, f=1\text{MHz}$	$C_T$	180							pF	

**NOTE:** (1) Thermal resistance from junction to ambient at 0.375" lead length, vertical P.C. board mounted

## Package Outline

Package	Case Outline				
DO-27					
	DIM	DO-27			
		Millimeters		Inches	
		Min	Max	Min	Max
	<b>A</b>	1.18	1.30	0.046	0.052
	<b>B</b>	7.20	9.60	0.285	0.375
<b>C</b>	25.40	---	1.000	---	
<b>D</b>	4.80	5.30	0.190	0.210	

This datasheet presents technical data of Tak Cheong's Silicon Rectifier Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

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