

# Preliminary Data Sheet

# 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<sup>°</sup>C Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant
- Cathode Indicated By Polarity Band

#### **Absolute Maximum Ratings** T<sub>A</sub> = 25°C unless otherwise noted



DEVICE MARKING DIAGRAM



SB3XX : Device Name SB320~ SB3100 KEL : KEL Logo

Parameter	Symbol	SB 320	SB 330	SB 340	SB 350	SB 360	SB 380	SB 3100	Units
Maximum Repetitive Peak Reverse Voltage	$V_{\text{RRM}}$	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 <sub>A</sub> =75°C)	I <sub>F(AV)</sub>	3.0							А
Non-repetitive Peak Forward Surge Current. (8.3mS Single Half Sine-wave)	I <sub>FSM</sub>	80							A
Operating Junction and Storage Temperature Range	$T_{J,}T_{STG}$	-55 to +125							°C
Thermal Resistance (Note 1) (Junction to Ambient)	R <sub>θJA</sub>	30							°C/W

#### Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

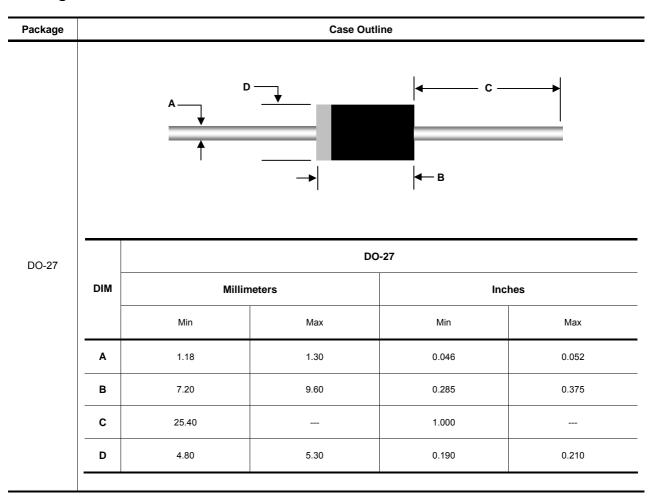
Parameter	Symbol	SB 320	SB 330	SB 340	SB 350	SB 360	SB 380	SB 3100	Units
Maximum D.C Reverse Current At Rated D.C Blocking Voltage @ TA=25°C @ TA=100°C	I <sub>R</sub>	1.0 30.0							mA
Forward Voltage @3A	V <sub>F</sub>	0.550			0.750		0.850		v
Total Capacitance @VR=4V, f=1MHz	C <sub>T</sub>	180						pF	

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



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# Package Outline



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 <a href="http://www.takcheong.com">http://www.takcheong.com</a>.

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