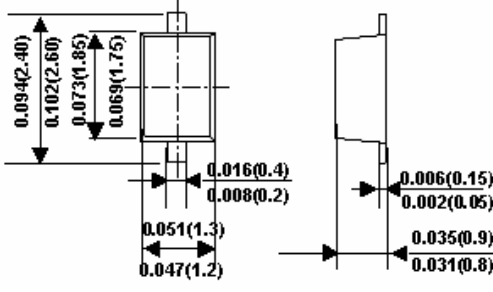
	<h2 style="margin: 0;">B0520WS THRU B0530WS</h2> <h3 style="margin: 0;">0.5A Surface Mount Schottky Barrier Rectifier</h3>
	Voltage Range 20 to 30 Volts 235m Watts Power Dissipation
<p><b>Features</b></p> <ul style="list-style-type: none"> <li>✧ Low forward voltage drop</li> <li>✧ Guard ring construction for transient protection</li> <li>✧ High conductance</li> <li>✧ Available in lead free version</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>✧ Case: SOD-323F, plastic</li> <li>✧ Case material – UL Flammability Rating Classification 94V-0</li> <li>✧ Moisture sensitivity: Level 1 per J-STD-020A</li> <li>✧ Polarity: Cathode Band</li> <li>✧ Terminals: Solderable per MIL-STD-202, Method 208</li> <li>✧ Marking: Cathode Band and Type Code Type Code: SD, SE</li> <li>✧ Weight: 0.004 grams (approx.)</li> </ul>	<p style="text-align: center;"><b>SOD-323F</b></p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
<p><b>Maximum Ratings and Electrical Characteristics</b> Rating at 25°C ambient temperature unless otherwise specified.</p>	

Maximum Ratings				
Type Number	Symbol	B0520WS	B0530WS	Units
Peak Repetitive Reverse Voltage	VRRM			
Working Peak Reverse Voltage	VRWM	20	30	V
DC Blocking Voltage	VR			
RMS Reverse Voltage	VR(RMS)	14	21	V
Average Rectified Current @ TL=100°C	Io	0.5		A
Non-repetitive Peak Forward Surge Current 8.3ms Single half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	2		A
Power Dissipation (Note 1)	Pd	235		mW
Thermal Resistance Junction to Ambient Air (Note 1)	RθJA	426		°C /W
Operating and Storage Temperature Range	TJ, TSTG	-40 to + 125		°C

Electrical Characteristics					
Type Number	Symbol	Min	Typ	Max	Units
Reverse Breakdown Voltage (Note 2) IR=500uA	V(BR)R	30			V
Leakage Current (Note 2) VR=15V VR=20V VR=30V	IR			80 100 500	uA
Forward Voltage Drop (Note 2) IF=0.1A IF=0.5A	VF		0.40	0.36 0.45	V
Junction Capacitance VR=0, f=1MHz	Cj		58		pF

Notes: 1. Valid Provided that Leads are Kept at Ambient Temperature.  
2. Short duration test pulse used to minimize self-heating effect..



## RATINGS AND CHARACTERISTIC CURVES (B0520WS THRU B0530WS)

FIG.1- FORWARD CURRENT DERATING CURVE

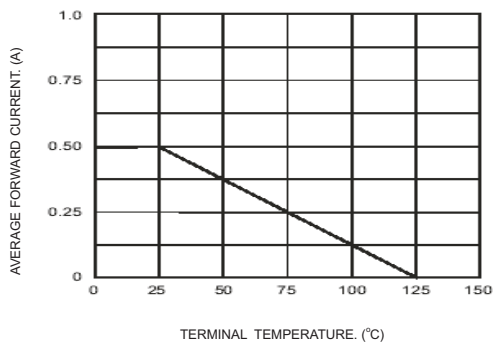


FIG.2- TYPICAL FORWARD CHARACTERISTICS

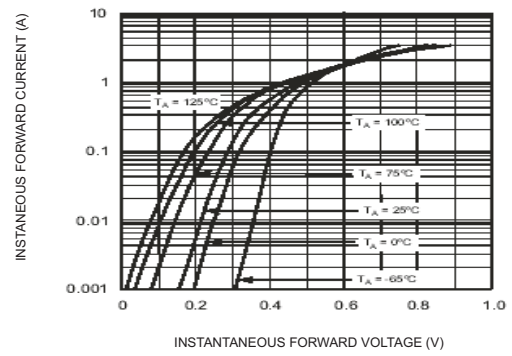


FIG.3- TYPICAL TOTAL CAPACITANCE VS REVERSE VOLTAGE

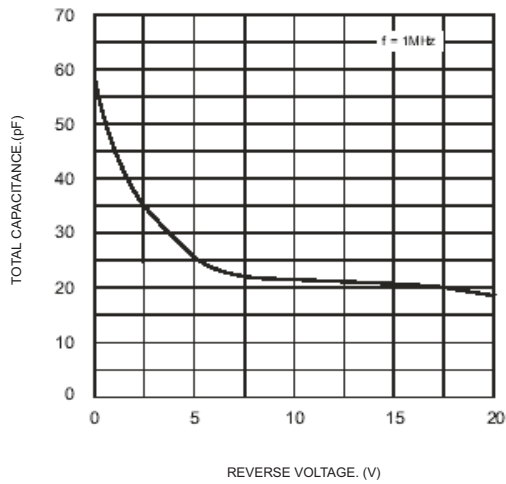
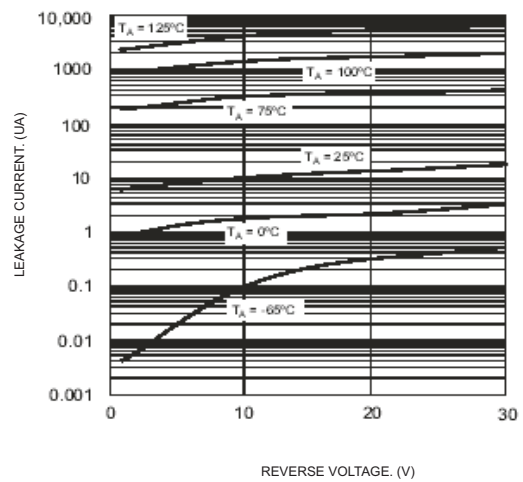


FIG.4- TYPICAL REVERSE CHARACTERISTICS





LittleDiode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

[LittleDiode.com](http://LittleDiode.com)

Looking forward to providing you with the best possible service.