

### B0530W

Surface Mount Schottky Barrier Diode		Forward Current - 0.5 A Reverse Voltage - 30 V		
Description	Package C	Outline		
Low Power Loss, High Efficiency		SOD123 Top View		
<ul> <li>Low Forward Voltage Schottky Rectifier</li> </ul>				
<ul> <li>High Current Capability</li> </ul>				
● High Surge Capability	S			
Mechanical Data				
•Case: SOD123 Package	Device Sc	Device Schematic & PIN Configuration		
•Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0			J. J.	
<ul> <li>Terminals:Matte tin plated,solderable per MIL-STD-750 ,method 2026</li> </ul>			2	
<ul> <li>Component in accordance to RoHS</li> </ul>				
● Halogen Free				
Note: Products with logo 🛛 🕂 🔨 or 🏳				
are made by HY Electronic (Cayman) Limited.	Product T	Product Type Marking Code		
Ordering Information				
Package :SOD123				
-			E	
Package :SOD123			E	
<ul><li>Package :SOD123</li><li>Reel Size :7 (inches)</li></ul>			E	
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> </ul>	specified.)		E	
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul>	specified.)		E	
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<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> <li>Maximum Ratings (@TA = +25°C, unless otherwise s</li> <li>Absolute Ratings</li> </ul>	· · ·			Unit V
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<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current	Symbol VRRM IFM		<b>Value</b> 30 0.5	V A
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms	Symbol       VRRM       IFM       IFSM		<b>Value</b> 30 0.5 5.5	V A A
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation	Symbol       VRRM       IFM       IFSM       PD		<b>/alue</b> 30 0.5 5.5 500	V A A mW
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range	Symbol       VRRM       IFM       IFSM       PD       TSTG	-50	<b>/alue</b> 30 0.5 5.5 500 to +150	V A A mW ° C
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range Thermal Resistance from Junction to Ambient	Symbol       VRRM       IFM       IFSM       PD       TSTG       RØJA	-50	<b>/alue</b> 30 0.5 5.5 500 to +150 200	V A A mW ° C C/W
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range Thermal Resistance from Junction to Ambient Voltage Rate of Change	Symbol       VRRM       IFM       IFSM       PD       TSTG       RØJA	-50	<b>/alue</b> 30 0.5 5.5 500 to +150 200	V A A mW ° C · C/W
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range Thermal Resistance from Junction to Ambient Voltage Rate of Change Electrical Characteristics	Symbol       VRRM       IFM       IFSM       PD       TSTG       ReJA       Dv/Dt	-50	<b>/alue</b> 30 0.5 5.5 500 to +150 200 1000	V A A mW ° C ° C/W V/uS
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range Thermal Resistance from Junction to Ambient Voltage Rate of Change Electrical Characteristics Reverse Voltage	Symbol           VRRM           IFM           IFM           IFSM           PD           TSTG           R0JA           Dv/Dt	-50 Symbol VBR	<b>Value</b> 30 0.5 5.5 500 to +150 200 1000 Max	V A A mW ° C ° C/W V/uS <b>Unit</b> V
<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise statement of the s	Symbol           VRRM           IFM           IFM           IFSM           PD           TSTG           ReJA           Dv/Dt	-50 Symbol	/alue 30 0.5 5.5 500 to +150 200 1000 Max 30	V A A mW ° C ° C/W V/uS
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<ul> <li>Package :SOD123</li> <li>Reel Size :7 (inches)</li> <li>Quantity Per Reel :3,000/Tape &amp; Reel</li> <li>Quantity One Box :45,000/Tape &amp; Reel</li> </ul> Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current Peak Forward Surge Current @ t = 8.3ms Power Dissipation Storage Temperature Range Thermal Resistance from Junction to Ambient Voltage Rate of Change Electrical Characteristics Reverse Voltage	Symbol           VRRM           IFM           IFM           IFM           IFSM           PD           TSTG           ReJA           Dv/Dt           IR=200uA           VR=15V           VR=30V	-50 Symbol VBR	/alue         30         0.5         5.5         500         to +150         200         1000         Max         30         20         130	V A A mW ° C ° C/W V/uS V/uS

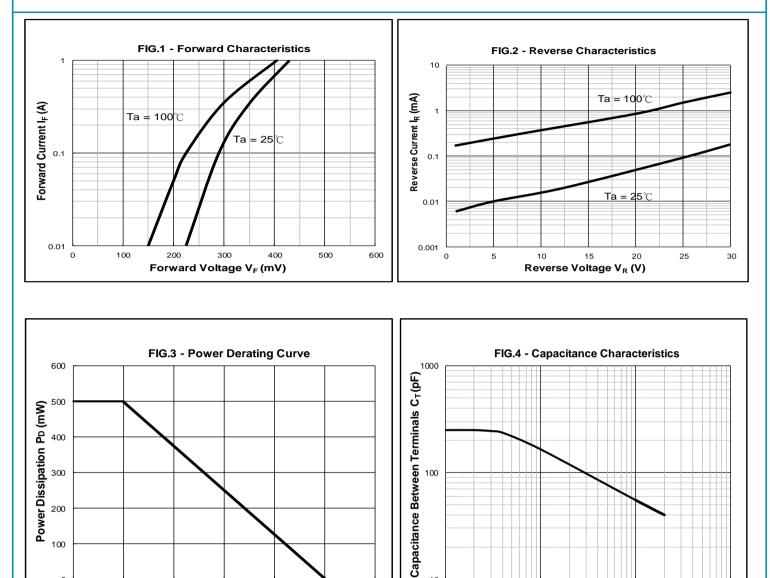
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Rev-0, 5-Jul-2022



# **B0530W**

### **Rating and Characteristic Curves**



0.1

Ambient Temperature Ta ( • C)

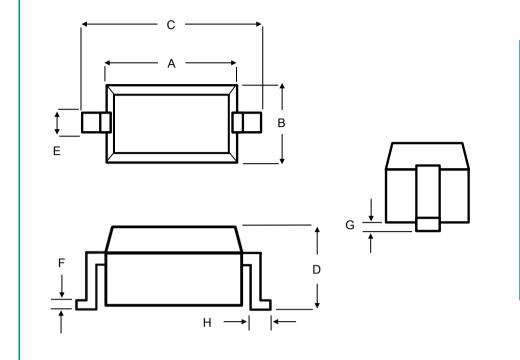
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Reverse Voltage V<sub>R</sub> (V)



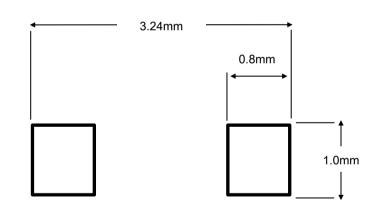
## B0530W

### Package Outline Dimensions



SOD123 Package			
Dim	Min	Max	
А	2.60	2.80	
В	1.50	1.70	
С	3.55	3.85	
D	1.05	1.25	
E	0.45	0.65	
F	0.08	0.15	
G	-	0.10	
н	0.25	0.45	
All Dimensions in mm			

### Suggested Soldering Pad Layout



Note:

1. The pad layout is for reference purposes only.

2.General tolerance ±0.05mm

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