

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		
 Low Forward Voltage Schottky Rectifier 				
 High Current Capability 				
● 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.	
 Terminals:Matte tin plated,solderable per MIL-STD-750 ,method 2026 			2	
 Component in accordance to RoHS 				
● 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	
Package :SOD123Reel Size :7 (inches)			E	
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel 	specified.)		E	
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 	specified.)		E	
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel Maximum Ratings (@TA = +25°C, unless otherwise set and set a	specified.) Symbol		E /alue	Unit
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings 	· · ·			Unit V
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 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage	Symbol VRRM		/alue 30	V
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel Maximum Ratings (@TA = +25°C, unless otherwise s Absolute Ratings Parameter Repetitive Peak Reverse Voltage Forward Rectified Current	Symbol VRRM IFM		Value 30 0.5	V A
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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		Value 30 0.5 5.5	V A A
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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		/alue 30 0.5 5.5 500	V A A mW
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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	/alue 30 0.5 5.5 500 to +150	V A A mW ° C
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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	/alue 30 0.5 5.5 500 to +150 200	V A A mW ° C C/W
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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	/alue 30 0.5 5.5 500 to +150 200	V A A mW ° C · C/W
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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	/alue 30 0.5 5.5 500 to +150 200 1000	V A A mW ° C ° C/W V/uS
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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	Value 30 0.5 5.5 500 to +150 200 1000 Max	V A A mW ° C ° C/W V/uS Unit V
 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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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 Package :SOD123 Reel Size :7 (inches) Quantity Per Reel :3,000/Tape & Reel Quantity One Box :45,000/Tape & Reel 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

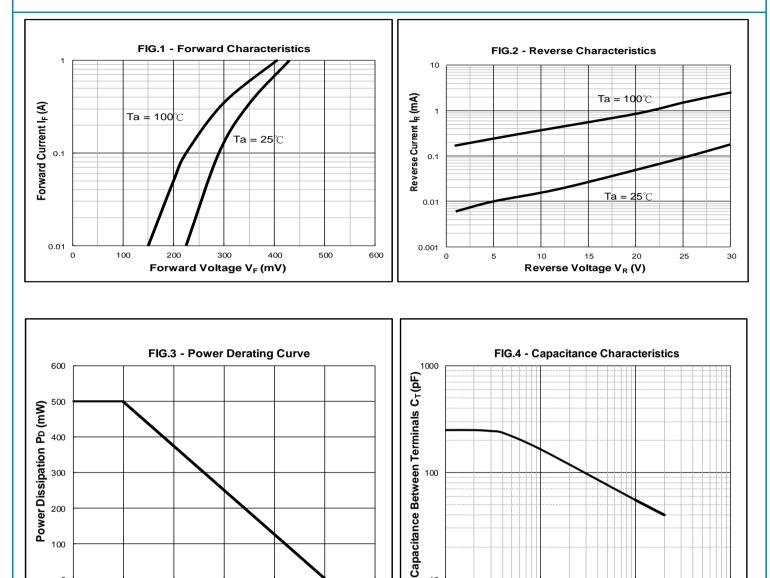
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Rev-0, 5-Jul-2022



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Rating and Characteristic Curves



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Ambient Temperature Ta (• C)

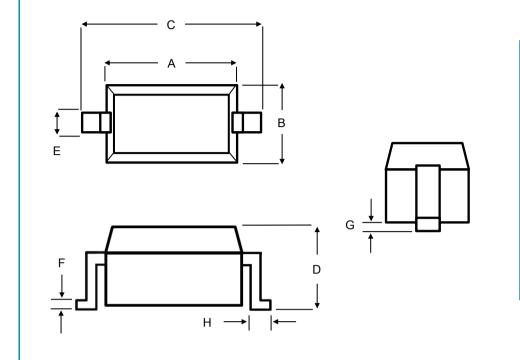
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Reverse Voltage V_R (V)



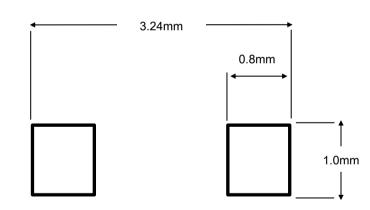
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Package Outline Dimensions



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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All specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

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