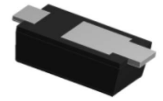
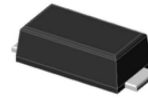


# GSS1150E thru GSS1200E

Surface Mount Schottky Rectifiers  
 Reverse Voltage 150V to 200V Forward Current 1.0A

## Features

- Low  $V_F$  Schottky rectifiers
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Heatsink structure
- High temperature soldering guaranteed: 260°C/10 seconds



SOD-123HE

## Applications

For use of fast switching in RF module, lighting, cell phone, portable device, power supplies and other consumer applications.

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

Parameter	Symbol	GSS1150E	GSS1200E	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	150	200	V
Maximum RMS Voltage	$V_{RMS}$	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0		A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	40		A
Typical Thermal Resistance, Junction to Ambient <sup>1</sup>	$R_{\theta JA}$	110		°C/W
Typical Thermal Resistance, Junction to Case <sup>1</sup>	$R_{\theta JC}$	25		
Typical Thermal Resistance, Junction to Lead <sup>1</sup>	$R_{\theta JL}$	15		
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150		°C

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

Parameter	Symbol	Test Conditions	Value	Unit
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=0.5\text{A}, T_A=25^\circ\text{C}$	0.80	V
		$I_F=1\text{A}, T_A=25^\circ\text{C}$	0.85	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^\circ\text{C}$	2.0	$\mu\text{A}$
		$T_A=125^\circ\text{C}$	200	$\mu\text{A}$

Note:

1. The thermal resistance from junction to ambient, case or lead, mounted on FR-4 P.C.B

## Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$ unless otherwise noted)

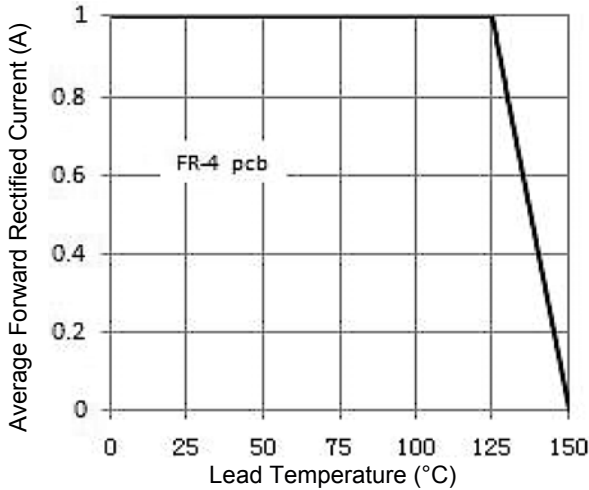


Figure 1. Forward Current Derating Curve

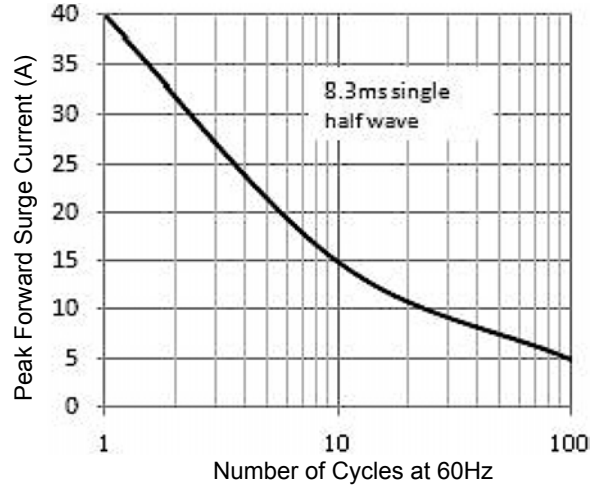


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

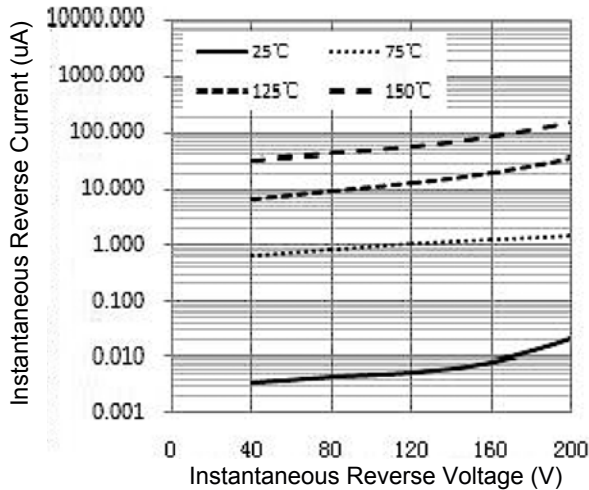


Figure 3. Typical Instantaneous Reverse Characteristics

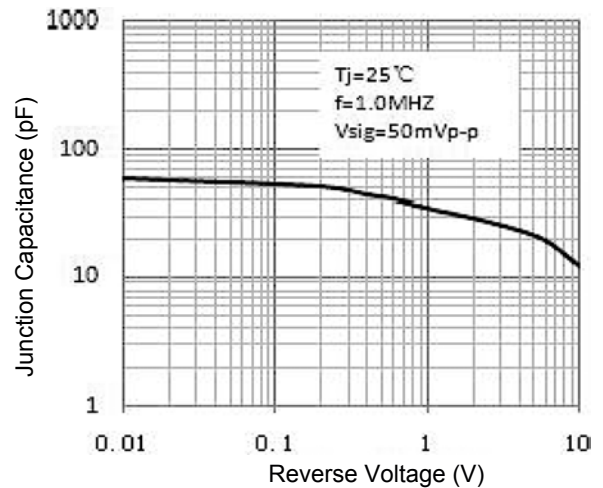


Figure 4. Typical Junction Capacitance

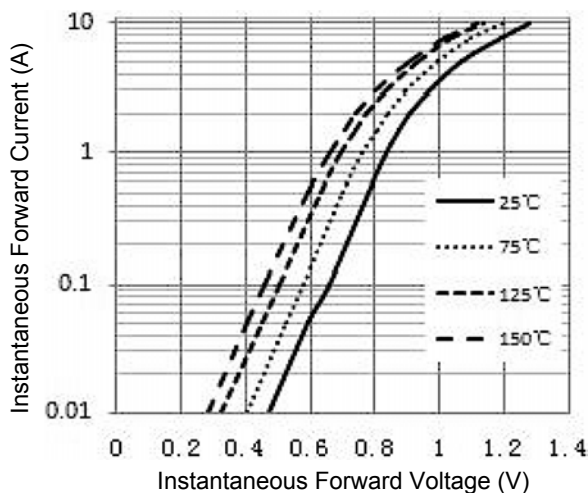
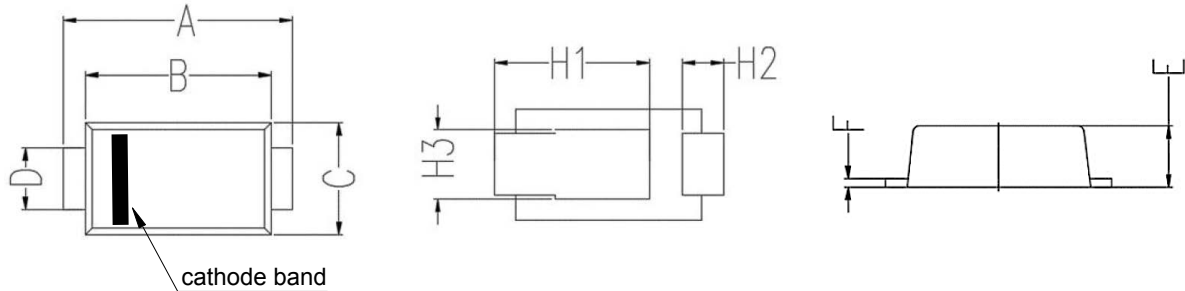


Figure 5. Typical Instantaneous Forward Characteristics

# GSS1150E thru GSS1200E

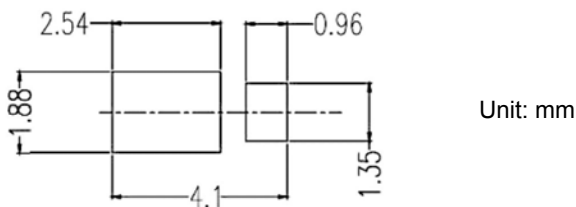
Surface Mount Schottky Rectifiers  
 Reverse Voltage 150V to 200V Forward Current 1.0A

## Package Outline Dimensions (SOD-123HE)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	3.50	3.90	0.138	0.154
B	2.90	3.10	0.114	0.122
C	1.70	2.00	0.067	0.079
D	0.85	1.05	0.033	0.041
E	0.88	1.08	0.035	0.043
F	0.10	0.25	0.004	0.010
H1	2.30	2.70	0.091	0.106
H2	0.43	0.83	0.017	0.033
H3	0.92	1.32	0.036	0.052

## Recommended Pad Layout



## Order Information

Device	Package	Marking	Carrier	Quantity
GSS1150E	SOD-123HE	S1150	Tape & Reel	3,000 Pcs / Reel
GSS1200E	SOD-123HE	S1200	Tape & Reel	3,000 Pcs / Reel

For more information, please contact us at: [inquiry@goodarksemi.com](mailto:inquiry@goodarksemi.com)