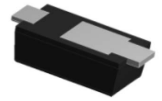
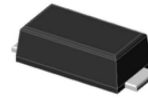


# GSS17E thru GSS1100E

Surface Mount Schottky Rectifiers  
 Reverse Voltage 70V to 100V Forward Current 1.0A

## Features

- Super low  $V_F$  Schottky barrier 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

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

Parameter	Symbol	GSS17E	GSS18E	GSS19E	GSS1100E	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	70	80	90	100	V
Maximum RMS Voltage	$V_{RMS}$	49	56	63	70	V
Maximum DC Blocking Voltage	$V_{DC}$	70	80	90	100	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	$I_{FSM}$	30				A
Rating For Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	3.8				A <sup>2</sup> sec
Typical Thermal Resistance, Junction to Ambient <sup>1</sup>	$R_{\theta JA}$	65				°C/W
Typical Thermal Resistance, Junction to Lead <sup>1</sup>	$R_{\theta JL}$	9				
Typical Thermal Resistance, Junction to Case <sup>2</sup>	$R_{\theta JC}$	35				
Operating Junction Temperature Range	$T_J$	-55 to +150				°C
Storage Temperature Range	$T_{STG}$	-55 to +150				°C

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

Parameter	Symbol	Test Conditions	Value	Unit
Minimum Breakdown Voltage	$V_{BR}$	$T_A=25^\circ\text{C}$ , $I_R=1\text{mA}$	100	V
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=1\text{A}$ , $T_A=25^\circ\text{C}$	0.80	V
		$I_F=1\text{A}$ , $T_A=125^\circ\text{C}$	0.65	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A=25^\circ\text{C}$	1.0	uA
		$T_A=125^\circ\text{C}$	150	
Typical Junction Capacitance	$C_J$	4.0V, 1MHz	28	pF

Note:

1. The thermal resistance from junction to ambient or lead, mounted on P.C.B with 5 × 5mm copper pads, 2 OZ, FR4 PCB
2. The thermal resistance from junction to case, mounted on P.C.B with recommended copper pads, 2 OZ, FR4 PCB

## Ratings and Characteristics Curves

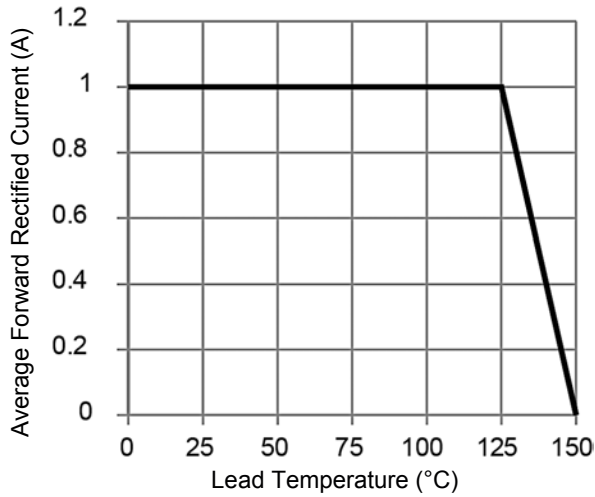


Figure 1. Forward Current Derating Curve

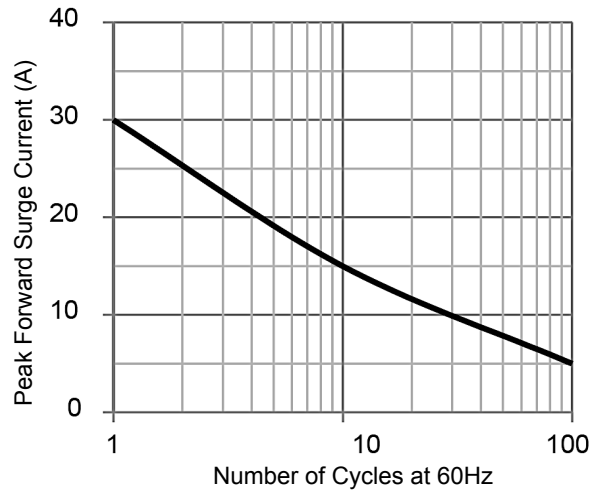


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

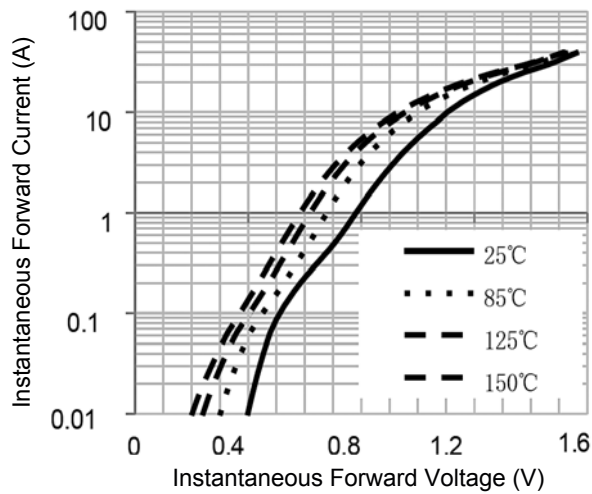


Figure 3. Typical Instantaneous Forward Characteristics

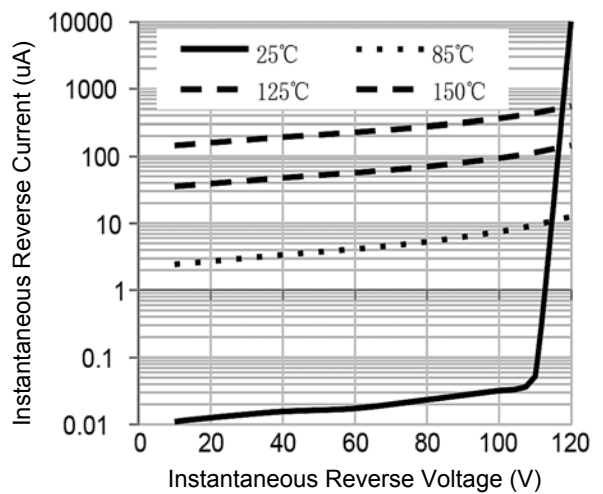


Figure 4. Typical Reverse Characteristics

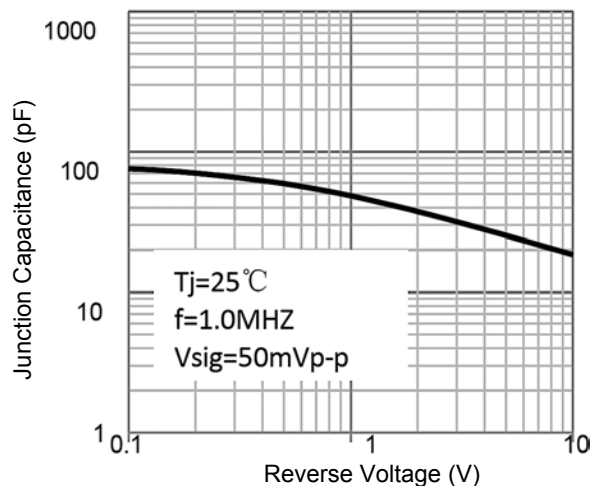
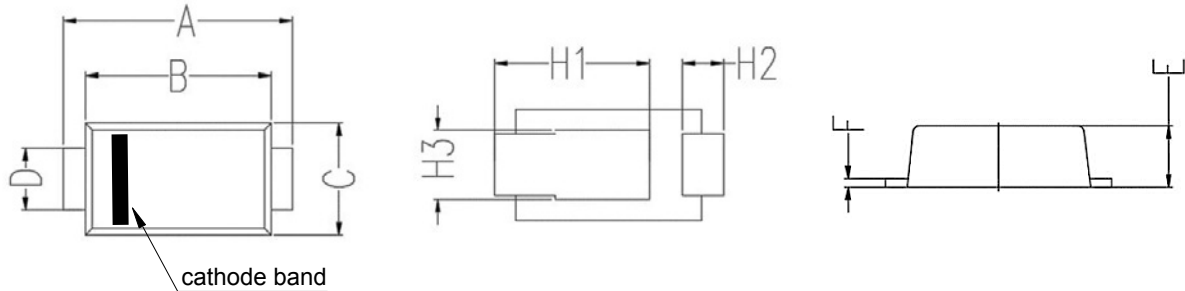


Figure 5. Typical Junction Capacitance

# GSS17E thru GSS1100E

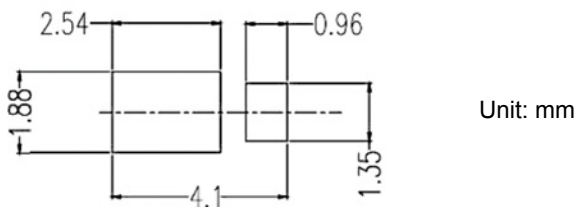
Surface Mount Schottky Rectifiers  
 Reverse Voltage 70V to 100V Forward Current 1.0A

## 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
GSS17E	SOD-123HE	S17	Tape & Reel	3,000 Pcs / Reel
GSS18E	SOD-123HE	S18	Tape & Reel	3,000 Pcs / Reel
GSS19E	SOD-123HE	S19	Tape & Reel	3,000 Pcs / Reel
GSS1100E	SOD-123HE	S1100	Tape & Reel	3,000 Pcs / Reel

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