

Feature

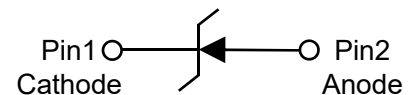
- For surface mounted applications
- Ideal for automated placement
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives



SOD-123HE

Mechanical Characteristics

- Case: SOD-123HE
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 14mg / 0.0005oz



Circuit Diagram

Absolute maximum rating@25°C

Parameter	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	250	V
RMS Reverse Voltage	V_{RMS}	175	V
Average Rectified Output Current	I_O	200	mA
Repetitive Peak Forward Current	I_{FRM}	625	mA
Non-repetitive Peak Forward Surge Current @t < 8.3ms	I_{FSM}	2.0	A
Total Power Dissipation	P_{tot}	500	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150	°C

Electrical characteristics per line@25°C

Parameter	Symbol	Value	Units
Reverse Breakdown Voltage at $I_R=100\mu A$	V_{BR}	250	V
Maximum Forward Voltage	V_F	at 100 mA	1.0
		at 200 mA	1.25
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$	0.1
		$T_a=150^\circ C$	100
Typical Junction Capacitance at $V_R=0V, f=1MHz$	C_j	5.0	pF
Maximum Reverse Recovery Time ¹⁾	t_{rr}	50	ns

Notes:

1) Measured with $I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A$

Typical Characteristics

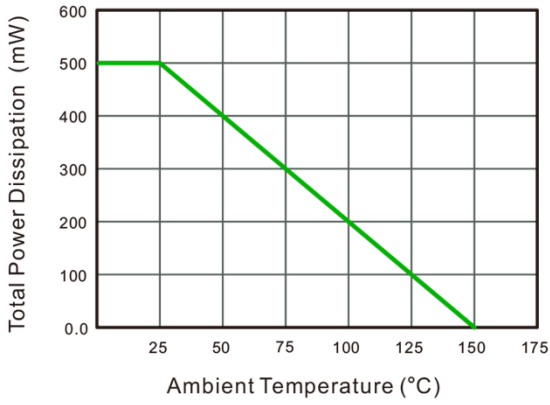


Fig.1 Power Derating Curve

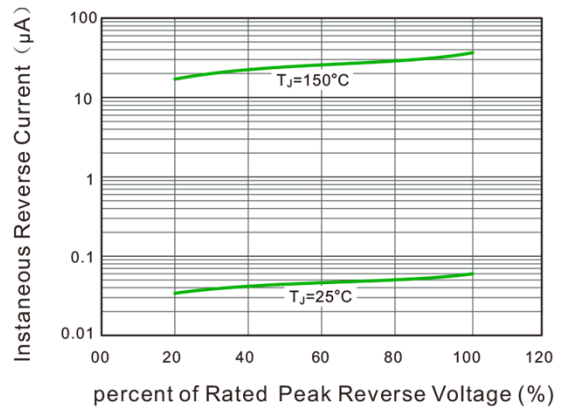


Fig.2 Typical Reverse Characteristics

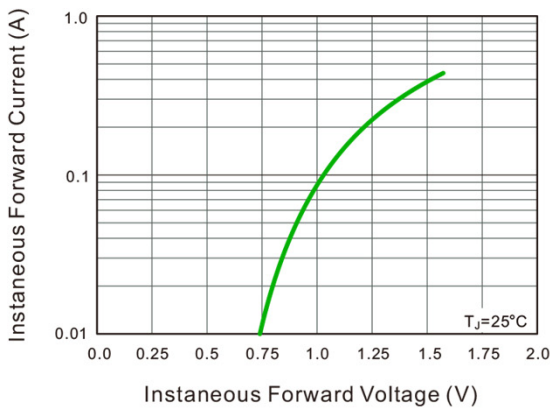


Fig.3 Typical Instantaneous Forward Characteristics

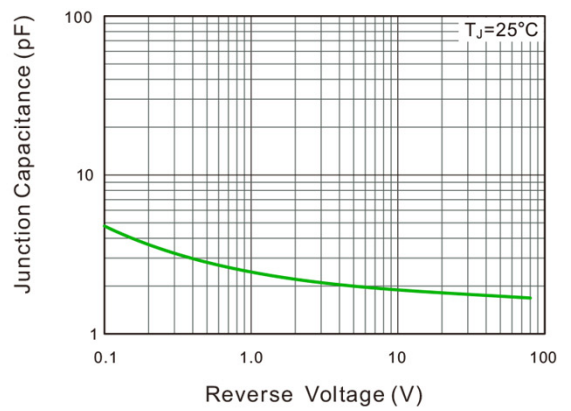
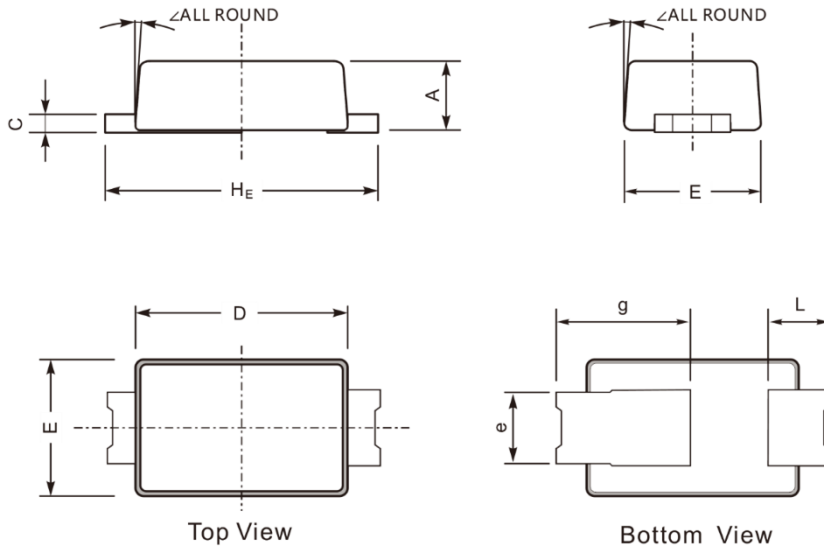
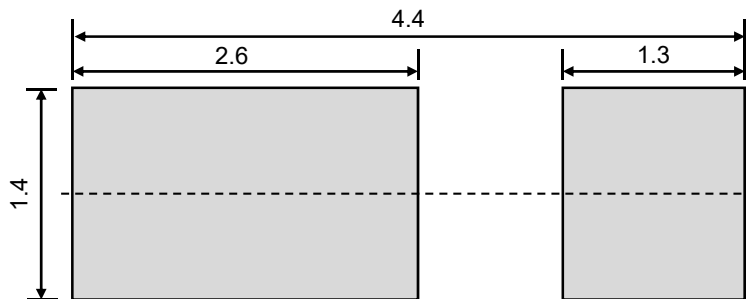


Fig.4 Typical Junction Capacitance

Product dimension (SOD-123HE)




Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.00	0.031	0.039
C	0.20	0.30	0.008	0.012
D	2.70	2.90	0.106	0.114
E	1.70	1.90	0.067	0.075
e	0.80	1.15	0.031	0.045
g	1.50	2.00	0.059	0.079
L	0.70	1.10	0.028	0.043
H _E	3.50	3.80	0.138	0.150
∠	12°			



Suggested PCB Layout

Unit:mm


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