



High-speed Switching Rectifiers

FEATURES

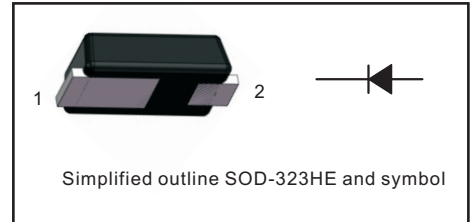
- For surface mounted applications
- Ideal for automated placement
- Low junction capacitance
- Low leakage current
- For general purpose switching applications

MECHANICAL DATA

- Case: SOD-323HE
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.4mg/0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings at 25 °C

Parameter	Symbols	1N4148HS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	75	V
Average Rectified Forward Current	$I_{F(AV)}$	150	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	0.5	A
at 1s		1	
at 1ms		4	
at 1us			
Total Power Dissipation	P_{tot}	400	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

Characteristics at $T_a = 25\text{ °C}$

Parameter	Symbols	1N4148HS	Units	
Reverse Breakdown Voltage at $I_R=1\mu A$	$V_{(BR)R}$	75	V	
Maximum Forward Voltage	V_F	0.715	V	
at 1 mA		0.855		
at 10 mA		1.00		
at 50 mA		1.25		
Peak Reverse Current	I_R	0.025	μA	
		at $V_R=20V$ $T_j=25\text{ °C}$		1
		at $V_R=75V$ $T_j=25\text{ °C}$		30
		at $V_R=25V$ $T_j=150\text{ °C}$		50
Typical Junction Capacitance	C_j	2	pF	
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	4	ns	

(1) Measured with $I_F=I_R=10mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$



Fig.1 Power Derating Curve

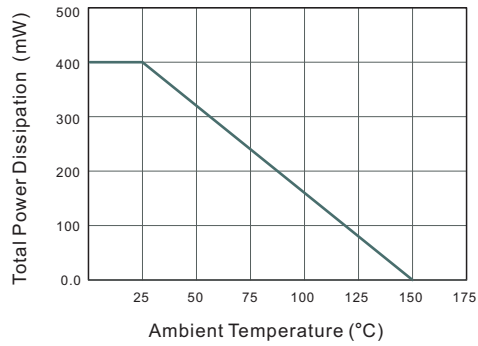


Fig.2 Typical Reverse Characteristics

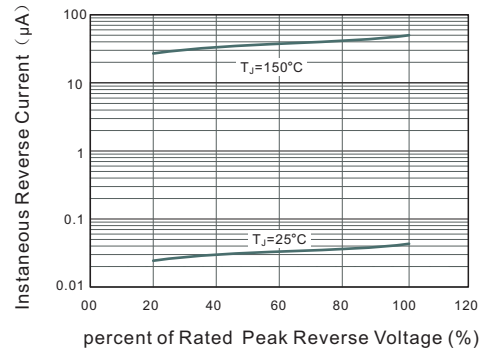


Fig.3 Typical Instantaneous Forward Characteristics

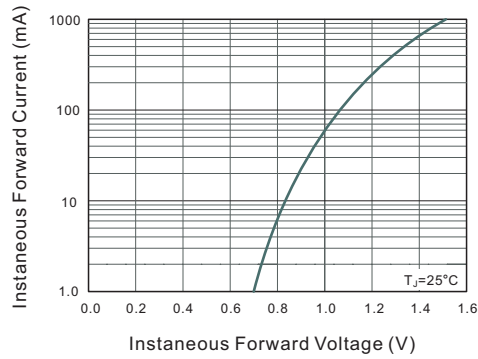
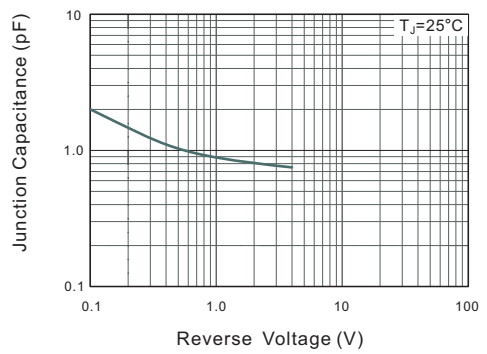


Fig.4 Typical Junction Capacitance

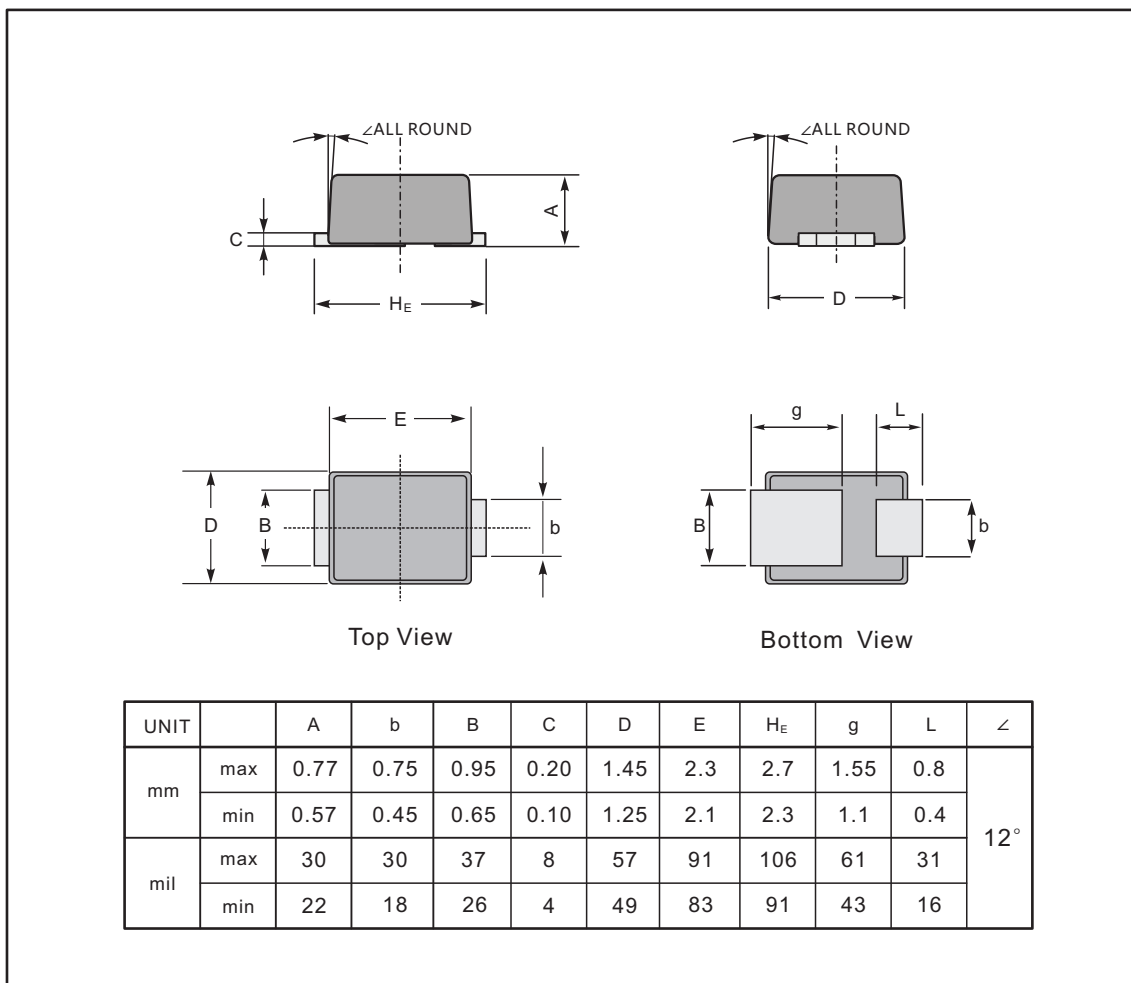




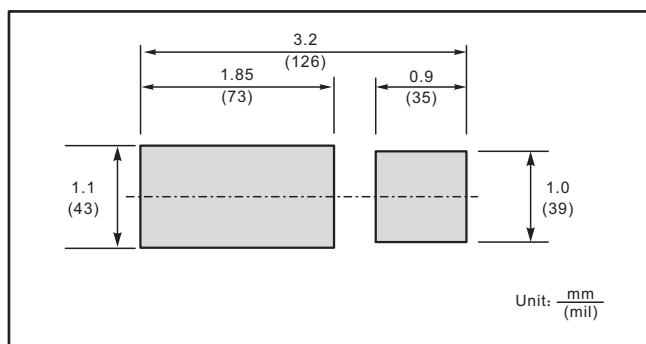
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323HE



The recommended mounting pad size



Marking

Type number	Marking code
1N4148HS	T4