

SOD-323HE Surface Mount Schottky Barrier Rectifier

Features

- V_R 40V to 200V
- $I_{F(AV)}$ 1A
- Low power loss, high efficiency
- Surface mount schottky barrier rectifier
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

Applications

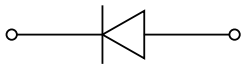
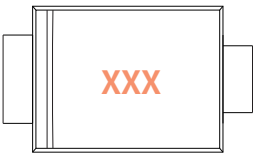
These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping.

Mechanical Data

- Case: SOD-323HE
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Cathode line denotes the cathode end

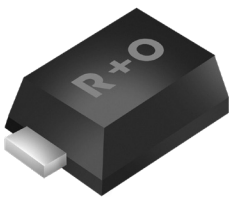
Function Diagram

Marking:
SS14HS:S4
SS16HS:S6
SS110HS:S10
SS115HS:S15
SS120HS:S20



Reverse Voltage
40V to 200 V
Forward Current
1.0 Ampere

SOD-323HE



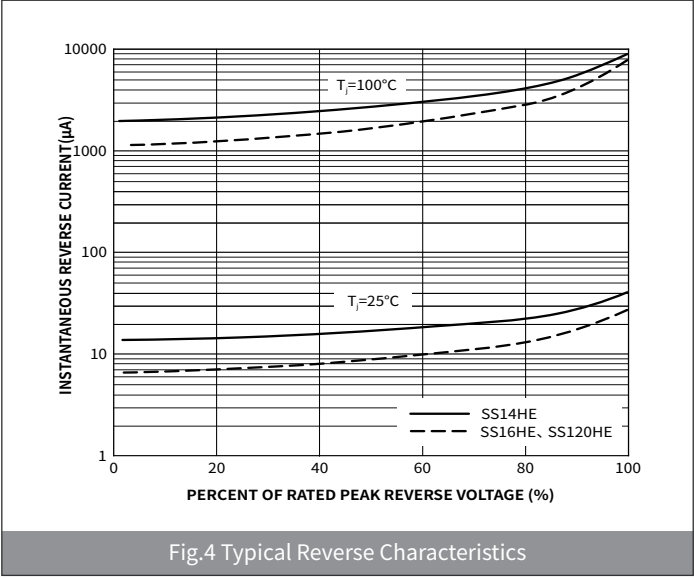
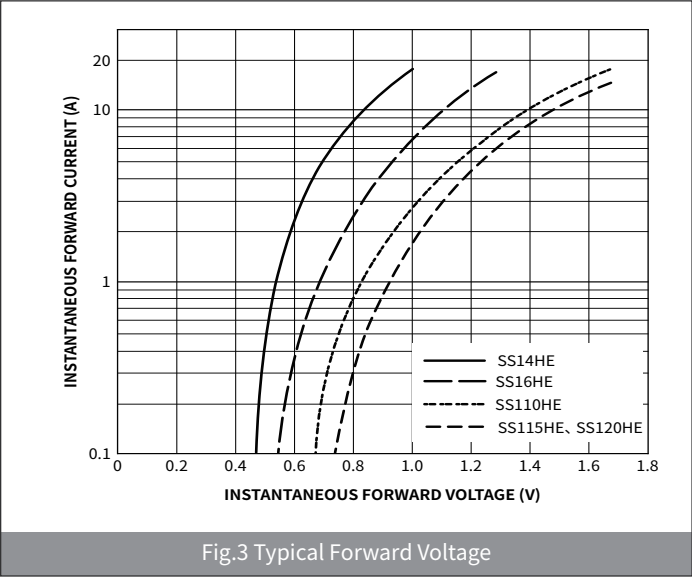
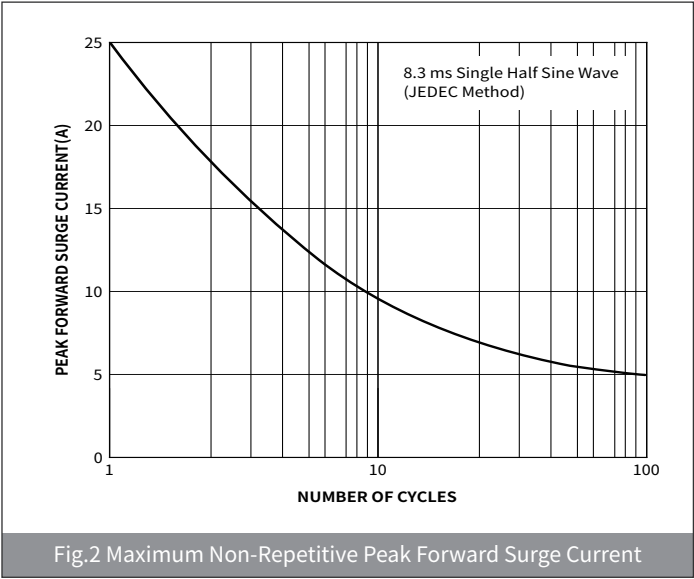
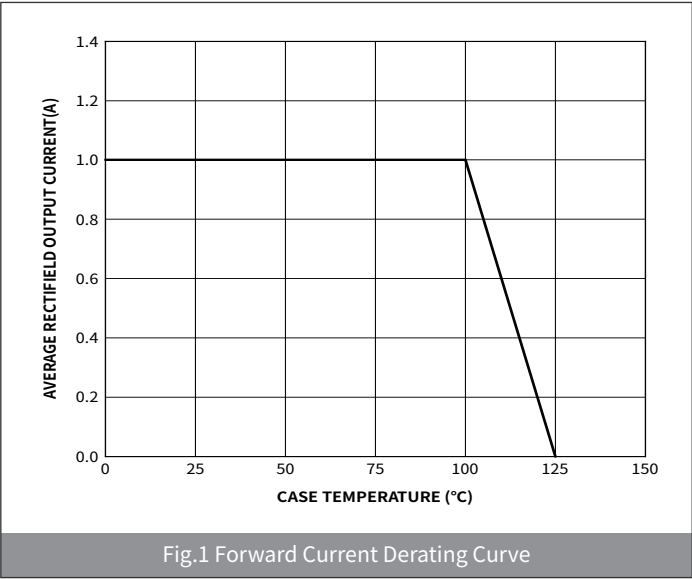
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	SS14HS	SS16HS	SS110HS	SS115HS	SS120HS
Maximum repetitive peak reverse voltage	V_{RRM}	V	40	60	100	150	200
Maximum RMS voltage	V_{RMS}	V	28	42	70	105	140
Maximum DC blocking voltage	V_{DC}	V	40	60	100	150	200
Maximum Average Forward Rectified Current	$I_{F(AV)}$	A	1.0				
Non-repetitive Peak Forward Surge Current @t=8.3ms Half-sine wave	I_{FSM}	A	25				
Storage temperature	T_{stg}	°C	-55~+150				
Junction temperature	T_j	°C	125				
Typical Thermal Resistance	$R_{\theta J-A}$	°C /W	150				

Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	SS14HS	SS16HS	SS110HS	SS115HS	SS120HS
Maximum instantaneous forward voltage	$I_F=1.0A$	V_{F1}	V	0.55	0.70	0.85		0.95
Maximum DC reverse currentat rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	mA	0.5	0.3			
	$V_R=V_{DC}, T_A=100^{\circ}C$	I_{R2}		20	15			
Typical Junction Capacitance	4.0V DC,1MHz	C_J	pF	60	40			

Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



SS14HS THRU SS120HS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

● Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323HE	R1	0.0054	3000	12000	120000	7"

● Package Outline Dimensions (SOD -323HE)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.57	0.77	0.022	0.030
b	0.45	0.75	0.018	0.030
B	0.65	0.95	0.026	0.037
C	0.10	0.20	0.004	0.008
D	1.25	1.45	0.049	0.057
E	2.10	2.30	0.083	0.091
g	1.10	1.55	0.043	0.061
L	0.25	0.50	0.010	0.020
HE	2.30	2.70	0.091	0.106
∠	12°		12°	

● Suggested Pad Layout

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
X	-	0.90	-	0.035
Y	-	1.10	-	0.043
Y1	-	1.00	-	0.039
M	-	3.20	-	0.126
N	-	1.85	-	0.073