

Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 40V~200V

Forward Current - 1.0 A

FEATURES

- ◆Metal silicon junction, majority carrier conduction
- ◆For surface mounted applications
- ◆Low power loss, high efficiency
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

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

Absolute Maximum Ratings and Electrical characteristics

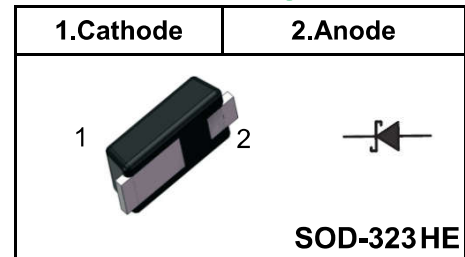
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	SS14HS	SS16HS	SS110HS	SS115HS	SS120HS	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	60	100	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 (JEDEC method)	I_{FSM}	25					A
Max Instantaneous Forward Voltage at 1 A	V_F	0.55	0.70	0.85	0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	0.5 20				0.3 15	mA
Typical Junction Capacitance ⁽¹⁾	C_j	60	40				pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	150					°C/W
Operating Junction Temperature Range	T_j	-55 ~ +125					°C
Storage Temperature Range	T_{stg}	-55 ~ +150					°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 8X 8 mm copper pad areas.

Pinning



Marking Code

SS14HS	K4
SS16HS	K6
SS110HS	K10
SS115HS	K15
SS120HS	K20

Fig.1 Forward Current Derating Curve

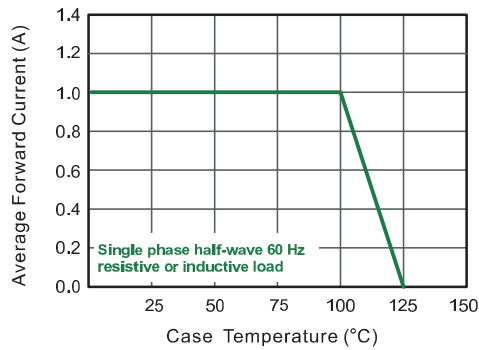


Fig.2 Typical Reverse Characteristics

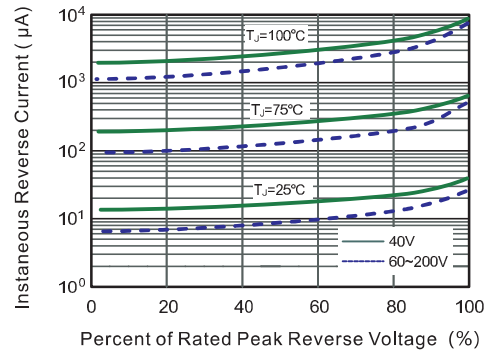


Fig.3 Typical Forward Characteristic

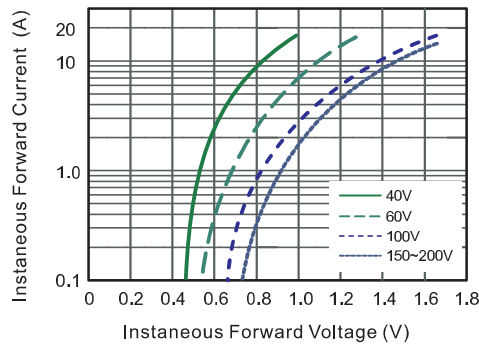


Fig.4 Typical Junction Capacitance

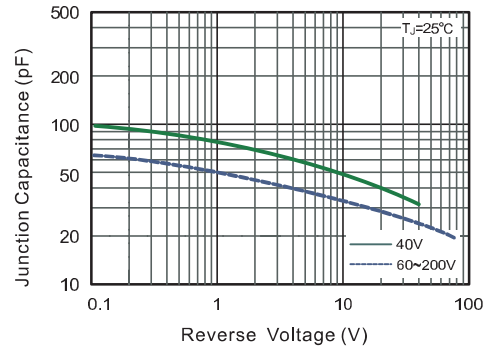


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

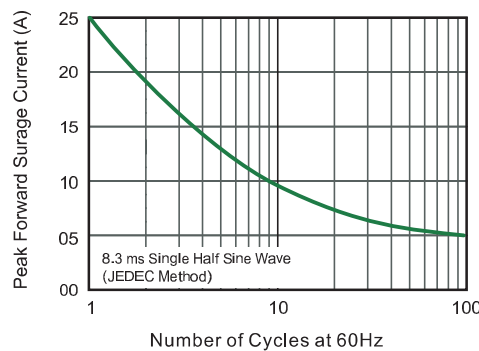
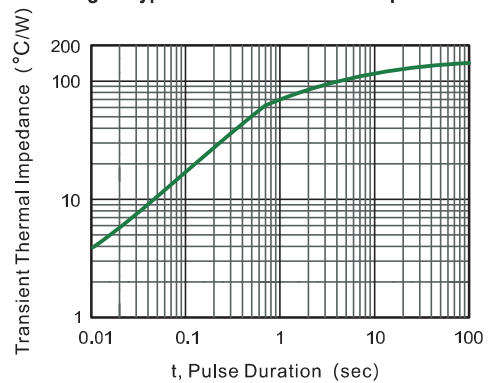


Fig.6- Typical Transient Thermal Impedance



Ordering information

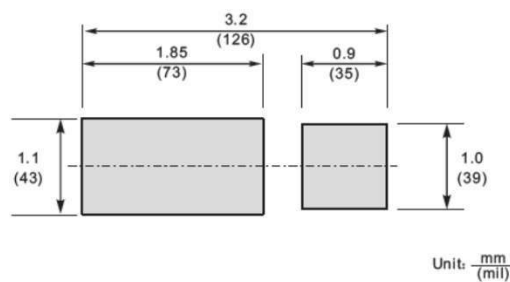
Package	Packing Description	Packing Quantity
SOD-323HE	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOD-323HE

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.57	0.77	22	30
b	0.45	0.75	18	30
B	0.65	0.95	26	37
C	0.10	0.20	4	8
D	1.25	1.45	49	57
E	2.1	2.3	83	91
HE	2.3	2.7	91	106
g	1.1	1.55	43	61
L	0.4	0.8	16	31
∠	12°			

The recommended mounting pad size



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