

Surface Mount Schottky Barrier Rectifier  
Reverse Voltage - 40 to 200 V  
Forward Current - 1.0A

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



#### 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 $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5 20	0.3 15				mA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	60	40				pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	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.

Fig.1 Forward Current Derating Curve

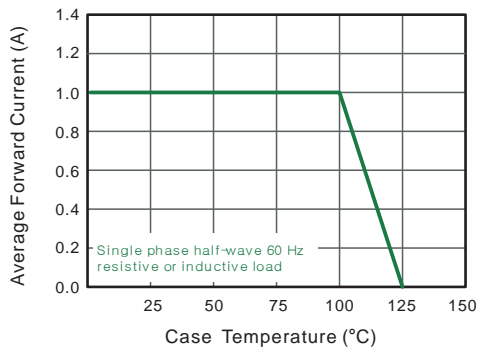


Fig.2 Typical Reverse Characteristics

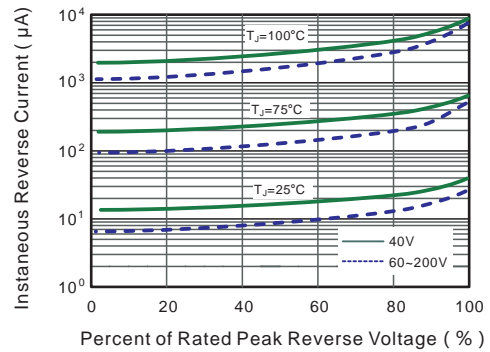


Fig.3 Typical Forward Characteristic

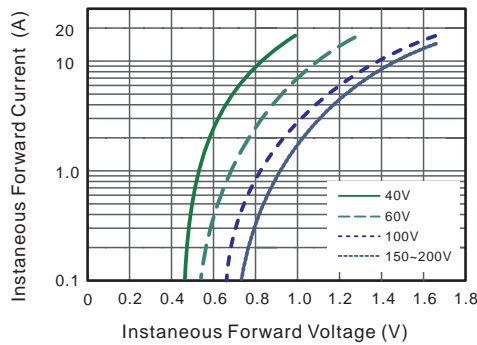


Fig.4 Typical Junction Capacitance

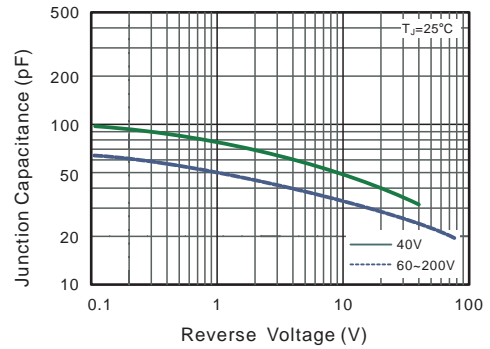


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

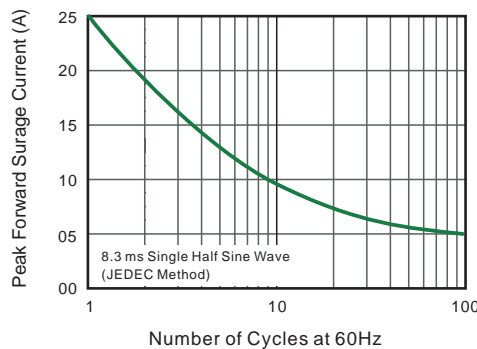
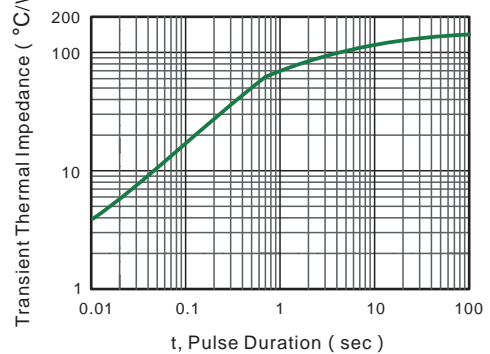


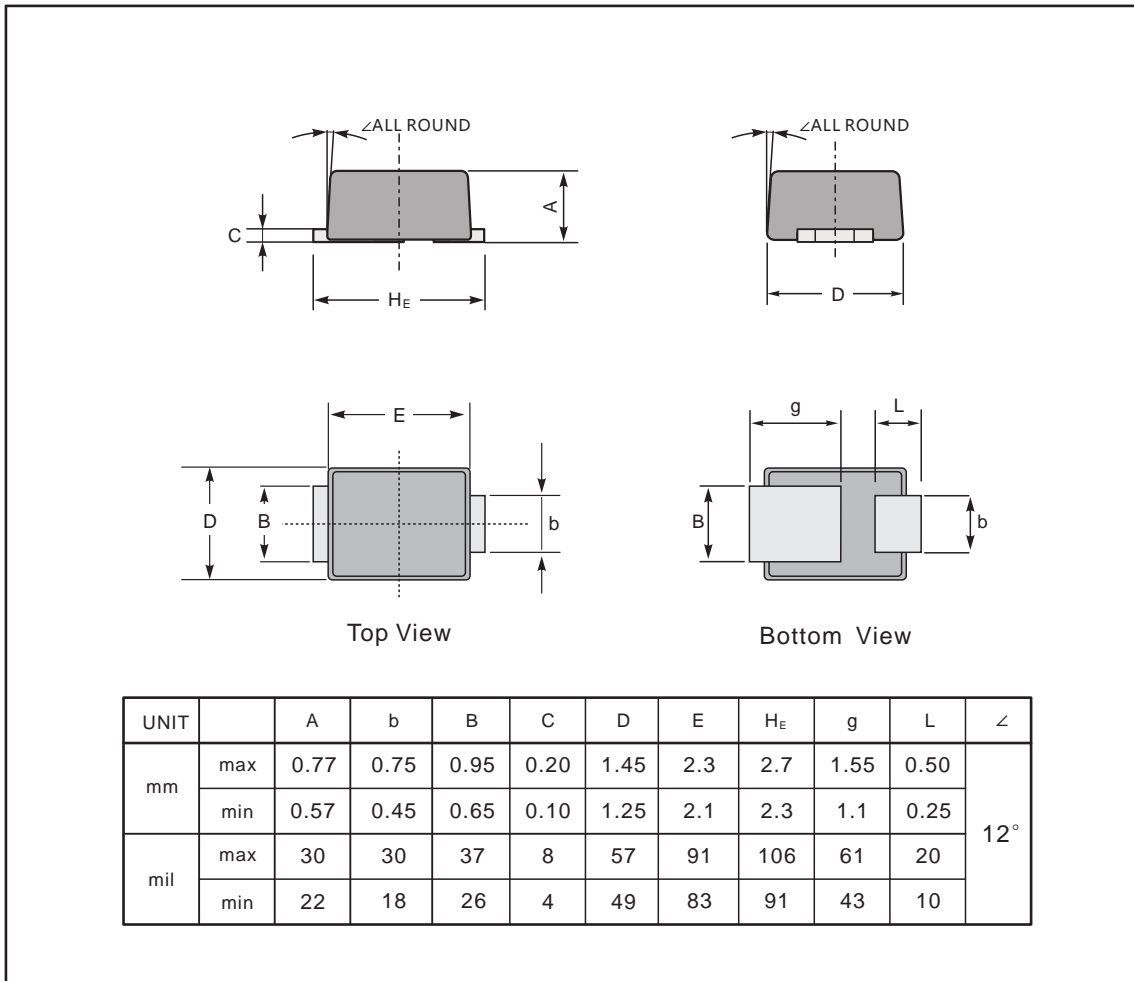
Fig.6- Typical Transient Thermal Impedance



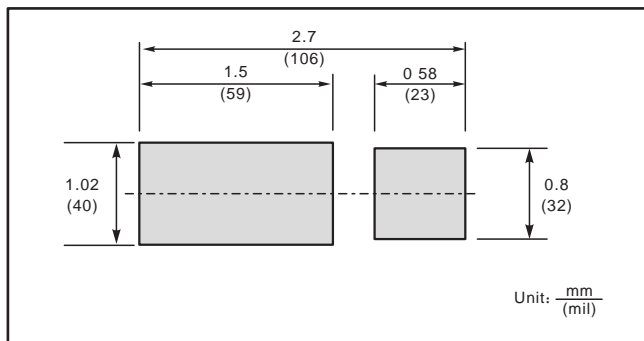
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323HE



### The recommended mounting pad size



### Marking

Type number	Marking code
SS14HS	K4
SS16HS	K6
SS110HS	K10
SS115HS	K15
SS120HS	K20