

SURFACE MOUNTSCHOTTKY RECTIFIERS

Reverse Voltage - 40V

Forward Current - 1.0 A

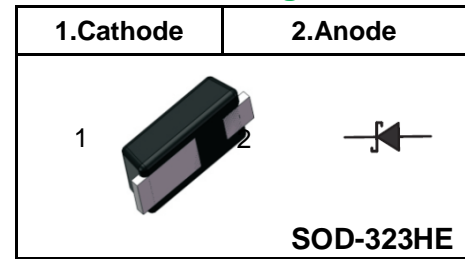
FEATURES

- ◆Metal silicon junction, majority carrier conduction
- ◆Heatsink structure
- ◆Low power loss, high efficiency
- ◆Super Low VF Schottky barrier diodes
- ◆For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆LeadfreeincomplywithEUroHS2011/65/EUdirectives

MECHANICAL DATA

- ◆Case:SOD-323HE
- ◆Terminals: Solderable per MIL-STD-750, Method2026
- ◆Approx. Weight: 5.4mg /0.00019oz

Pinning



Marking Code

PS14S	14S
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Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter	Symbols	PS14S	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	I_{F(AV)}	1.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-waveSuperimposed On Rated Load	I_{FSM}	15	A
Operating junction temperature range	T_j	125	°C
Storage temperature range	T_{stg}	- 55 to +150	°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbols	PS14S	Units
Minimum Breakdown voltage	Ta = 25°C,IR=1mA	V_{BR}	40	V
Maximum instantaneous forward voltage	IF=1A,Ta=25°C	V_F	0.58	V
Maximum DC reverse current at rated DC blocking voltage	Ta = 25°C	I_R	50	uA
Typical junction capacitance	4.0 V, 1 MHz	C_J	60	pF

Fig.1 Forward Current Derating Curve

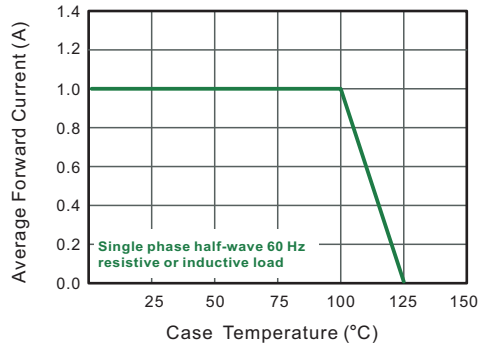


Fig.2 Typical Reverse Characteristics

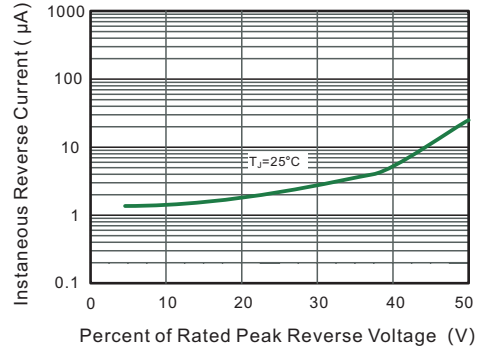


Fig.3 Typical Forward Characteristic

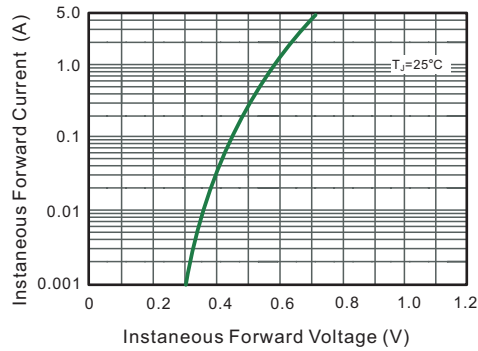


Fig.4 Typical Junction Capacitance

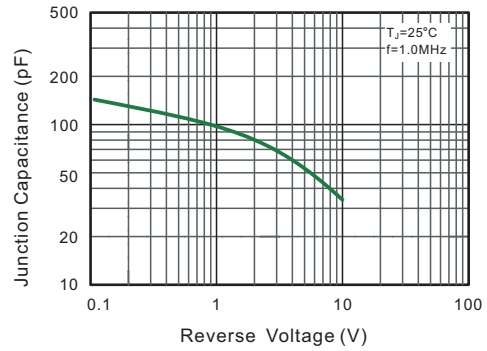
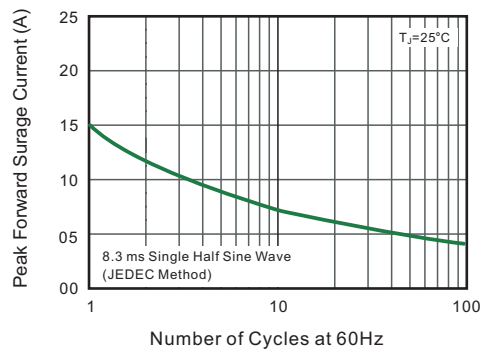


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Ordering information

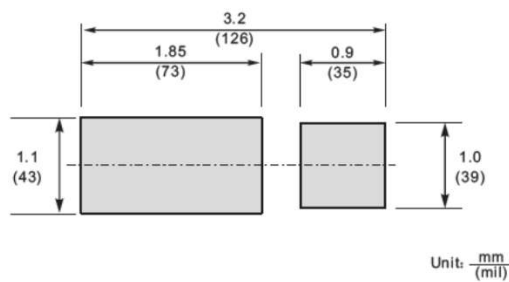
Package	Packing Description	Packing Quantity
SOD-323HE	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

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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