

**SURFACE MOUNT SCHOTTKY RECTIFIERS**

**Reverse Voltage - 30V**

**Forward Current - 1.0 A**

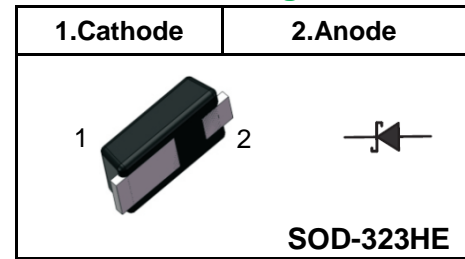
**FEATURES**

- ◆ High current rectifier Schottky diodes
- ◆ Low voltage, low inductance
- ◆ For detection and step-up-conversion
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

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

**Pinning**



**Marking Code**

<b>SSU13S</b>	<b>SU3</b>
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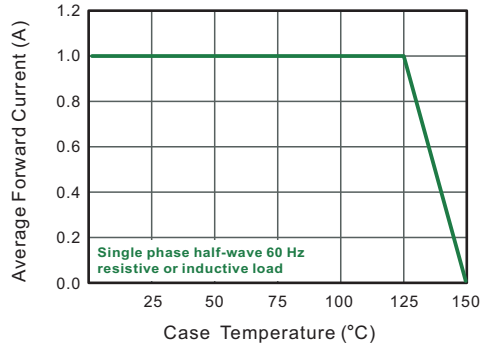
**Maximum Ratings (TA = 25 °C unless otherwise noted)**

Parameter	Symbols	SSU13S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Forward Current	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	$I_{FSM}$	20	A
Operating junction temperature range	$T_j$	150	°C
Storage temperature range	$T_{stg}$	- 55 to +150	°C

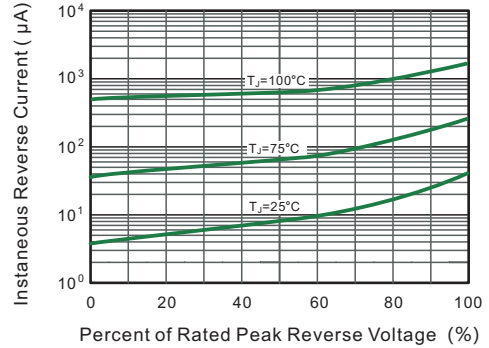
**Electrical Characteristics (TA = 25 °C unless otherwise noted)**

Parameter	Test Conditions	Symbols	SSU13S	Units
Minimum Breakdown voltage	$T_a = 25^{\circ}C, I_R = 10\mu A$	$V_{BR}$	30	V
Maximum forward voltage	$I_F = 0.1A, T_a = 25^{\circ}C$ $I_F = 0.7A, T_a = 25^{\circ}C$ $I_F = 1A, T_a = 25^{\circ}C$	$V_F$	0.25(typ) 0.36(typ) 0.38(typ)	V
Peak Reverse Current $V_R = 5.0V$ <span style="margin-left: 200px;"><math>V_R = 30V</math></span>	$T_a = 25^{\circ}C$	$I_R$	10(typ) 60(max)	uA
Typical junction capacitance	$V_R = 10V, 1MHz$	$C_t$	200	pF

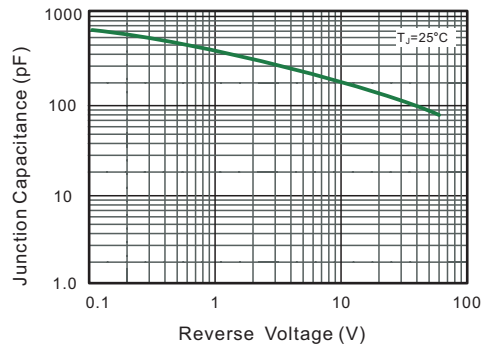
**Fig.1 Forward Current Derating Curve**



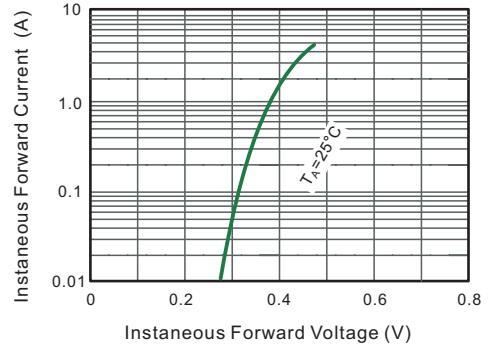
**Fig.2 Typical Reverse Characteristics**



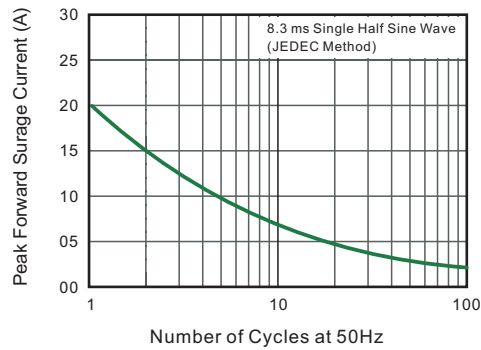
**Fig.3 Typical Junction Capacitance**



**Fig.4 Typical Forward Characteristic**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Ordering information**

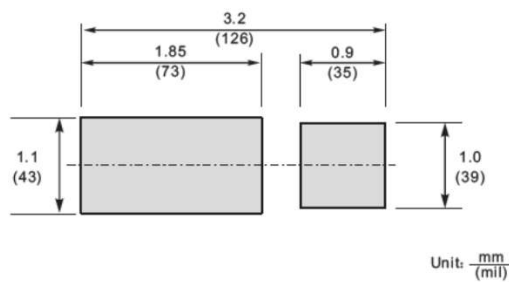
Package	Packing Description	Packing Quantity
SOD-323HE	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

**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**



## Disclaimer

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