

SURFACE MOUNTSCHOTTKY RECTIFIERS
Reverse Voltage - 40V
Forward Current - 1.0 A
FEATURES

- ◆ Guard Ring Die Construction for Transient Protection
- ◆ High Surge Capability
- ◆ Low power loss, high efficiency
- ◆ High Current Capability and Low Forward Voltage Drop
- ◆ Leadfree in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

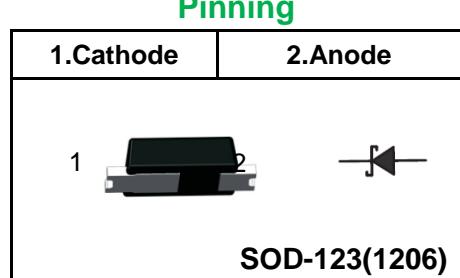
- ◆ Case: SOD-123(1206)
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 14mg / 0.0005oz

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

Parameter	Symbols	SS14L	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Average Forward Current @ TT = 119°C	$I_{F(AV)}$	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-waves superimposed on rated load (JEDEC Method)	I_{FSM}	40	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	SS14L	Units
Reverse Breakdown Voltage	TA=25°C, IR=20uA	$V_{(BR)R}$	40	V
Forward Voltage	IF=0.5A, TA=25°C IF=1A, TA=25°C	V_F	0.45 0.50	V
Leakage Current	VR=40V, TA=25°C VR=40V, TA=100°C	I_R	20 6.0	uA
Total Capacitance	VR=10V, f=1.0MHZ	C_T	60	pF



Marking Code

SS14L	F04
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Fig.1 Forward Current Derating Curve

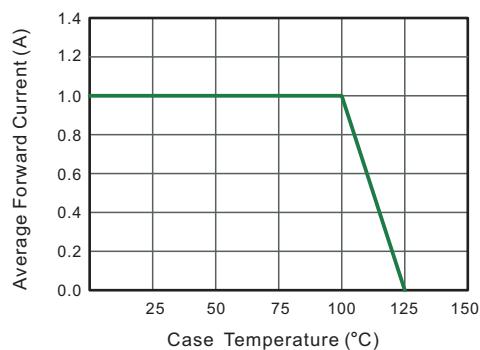


Fig.2 Typical Forward Characteristics

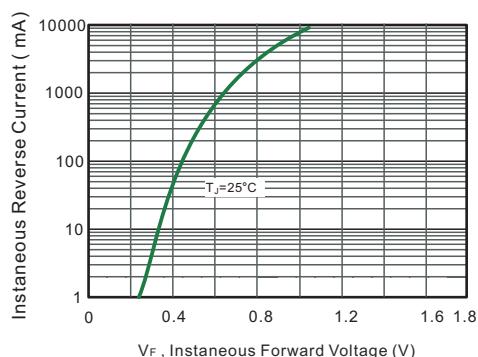


Fig.3 Typical Pulsed Reverse Characteristics

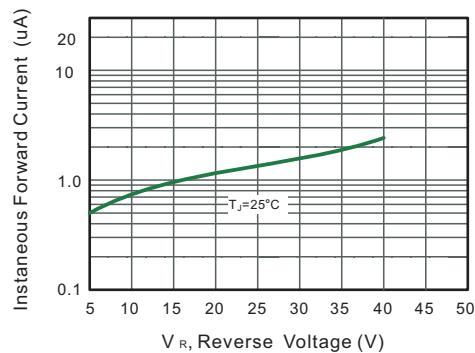


Fig.4 Typical Junction Capacitance

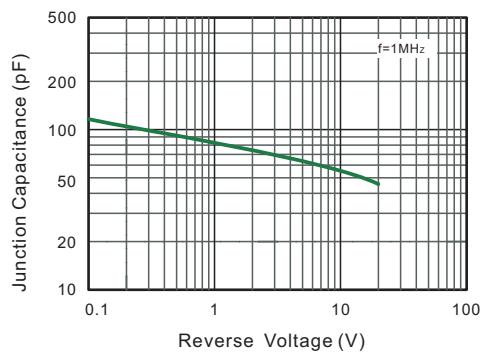
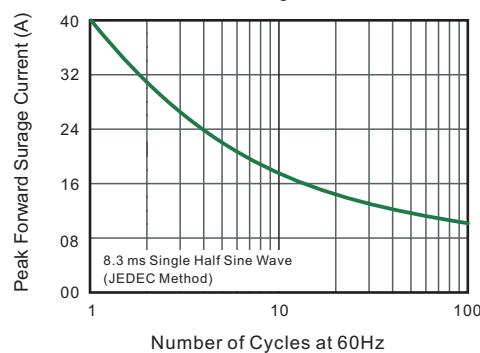


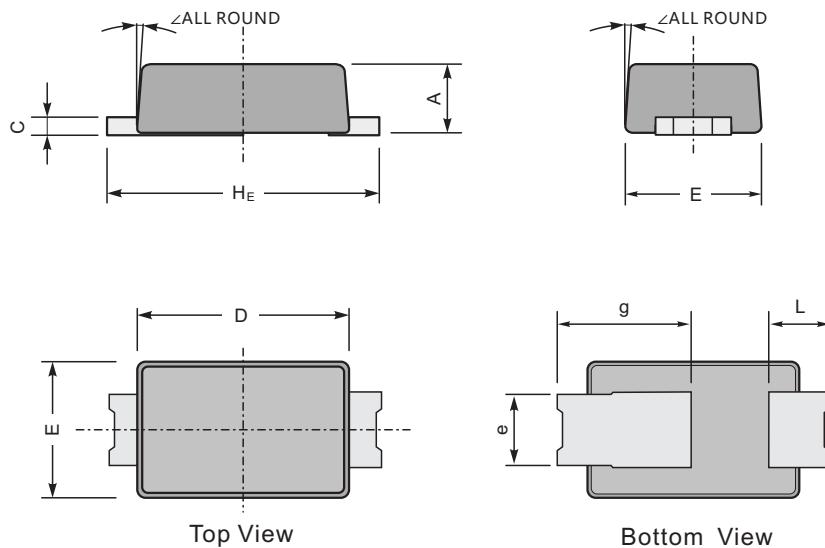
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Package Outline

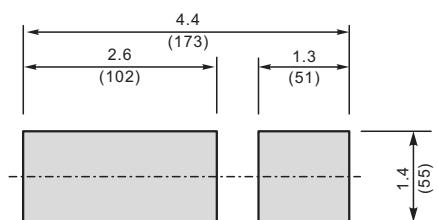
SOD-123(1206)

Plastic surface mounted package; 2leads



UNIT		A	C	D	E	e	g	L	H _E	<
mm	max	1.0	0.3	2.9	1.9	1.15	2.0	1.1	3.8	12°
	min	0.8	0.2	2.7	1.7	0.8	1.5	0.7	3.5	
mil	max	39	11.8	114	75	45	79	43	150	12°
	min	31	7.9	106	67	31	59	28	138	

The recommended mounting pad size



Unit: $\frac{\text{mm}}{(\text{mil})}$

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOD-123(1206)	Tape/Reel, 7" reel	3000	EIA-481-1