

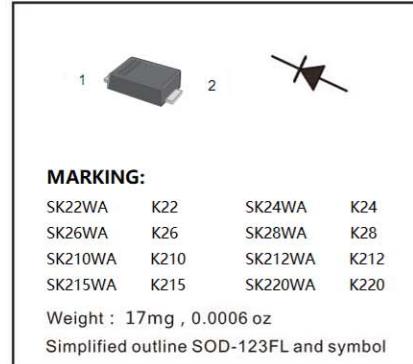
Surface Mount Schottky Barrier Rectifier

Reverse Voltage - 20 to 200 V

Forward Current - 2.0A

● Features

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



● 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	SK22WA	SK24WA	SK26WA	SK28WA	SK210WA	SK212WA	SK215WA	SK220WA	Units		
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V		
Maximum RMS voltage	V _{RMS}	14	28	42	56	80	100	105	140	V		
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V		
Maximum Average Forward Rectified Current	I _{F(AV)}	2.0							A			
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	40							A			
Max Instantaneous Forward Voltage at 2 A	V _F	0.55		0.70		0.85		0.95		V		
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a = 100°C	I _R	0.5 10		0.3 5						mA		
Typical Junction Capacitance ¹⁾	C _J	220		80						pF		
Operating Junction Temperature Range	T _j	-55 ~ +125							°C			
Storage Temperature Range	T _{stg}	-55 ~ +150							°C			

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

Fig.1 Forward Current Derating Curve

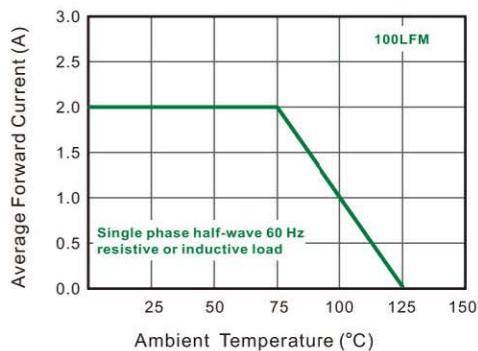


Fig.2 Typical Reverse Characteristics

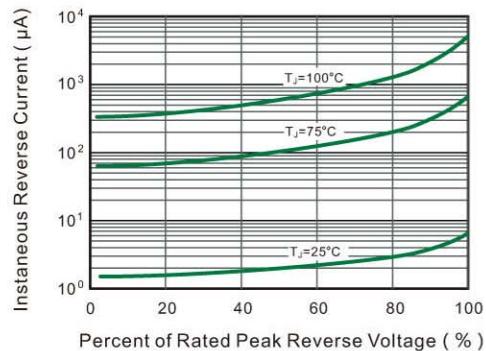


Fig.3 Typical Forward Characteristic

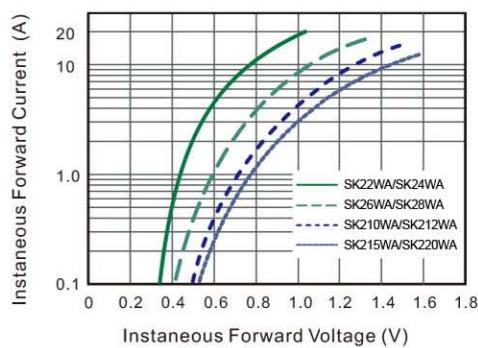


Fig.4 Typical Junction Capacitance

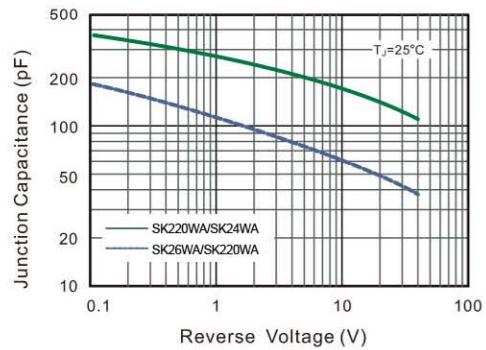
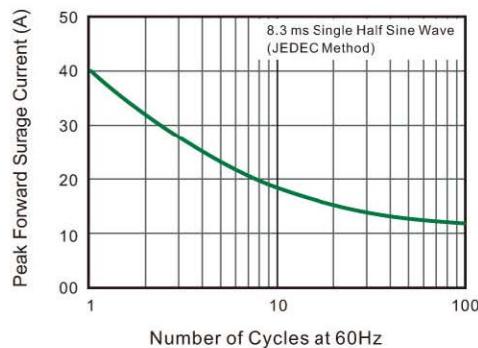
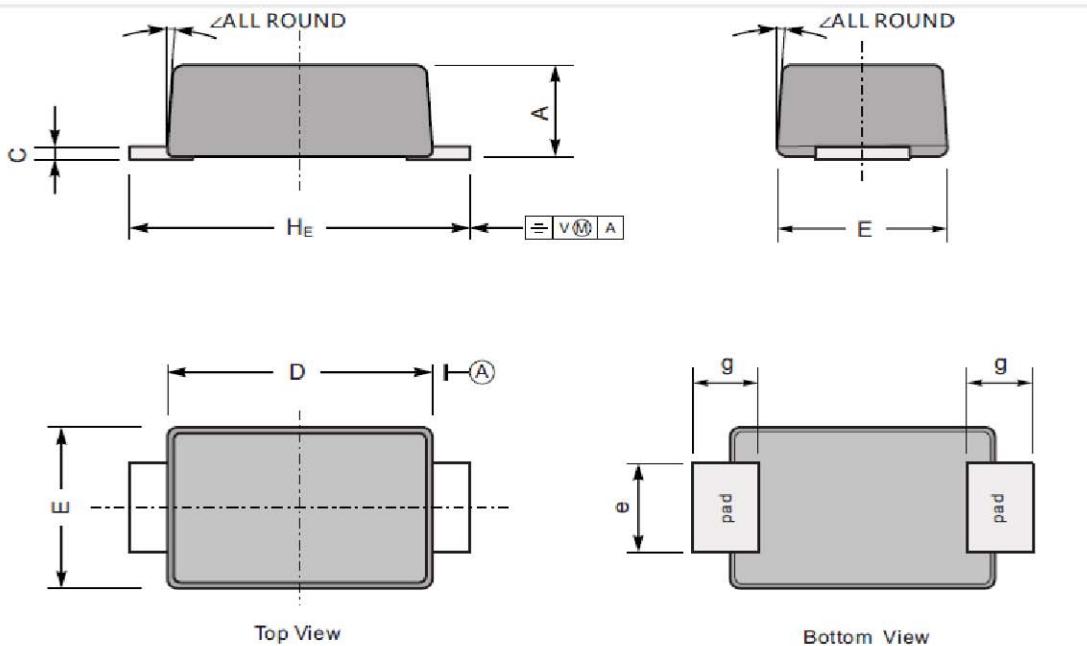


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



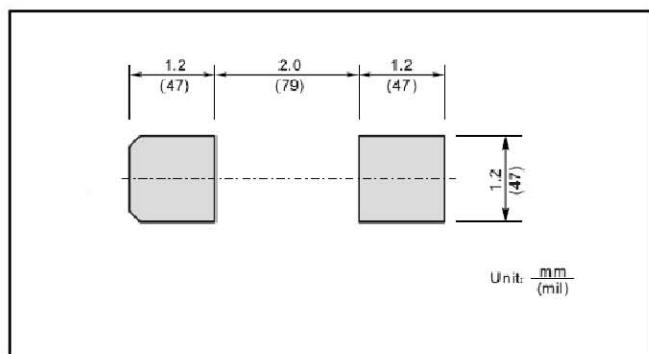
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

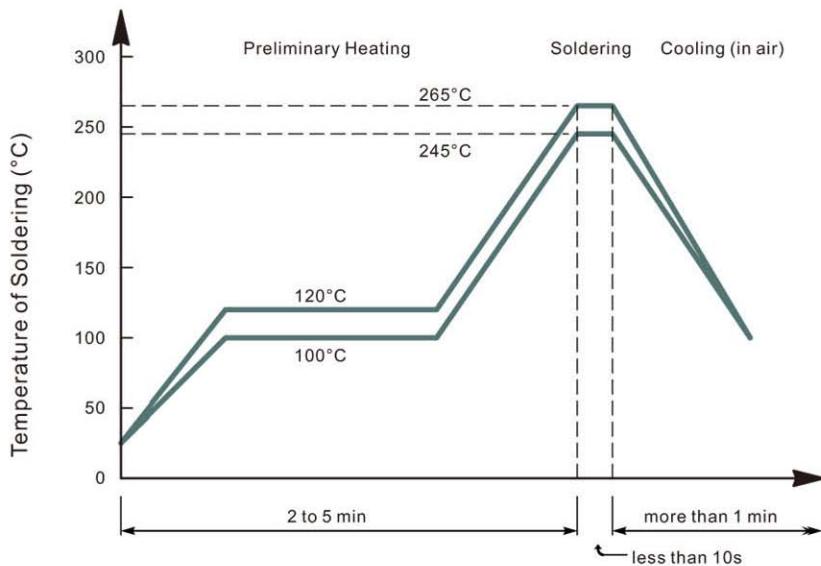


UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	7°
	min	35	4.7	102	67	31	28	138	

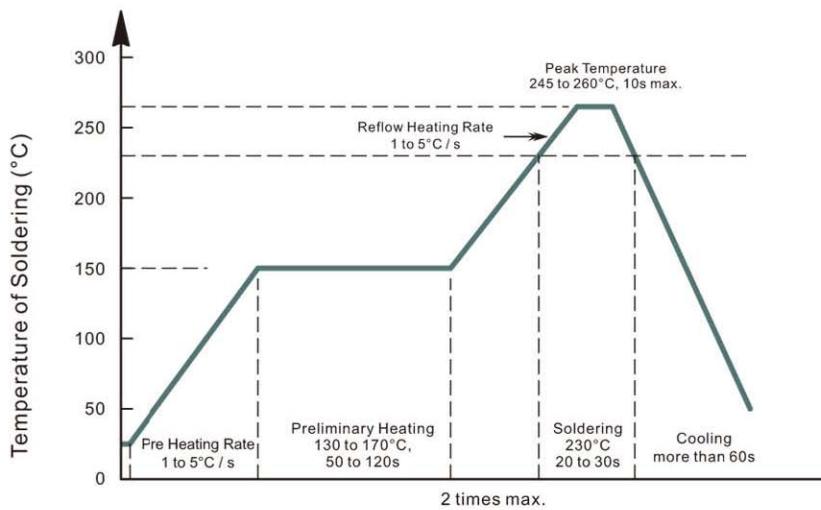
The recommended mounting pad size



- Recommended condition of flow soldering



- Recommended condition of reflow soldering



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

- Condition of hand soldering

Temperature: 320°C

Time: 3s max.

Times: one time

- Remark:

Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)