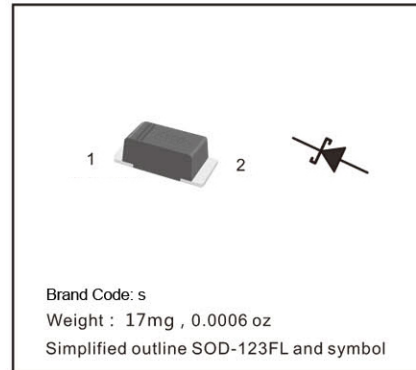


SK22WA-SK220WA

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 $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	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.

SK22WA-SK220WA

Fig.1 Forward Current Derating Curve

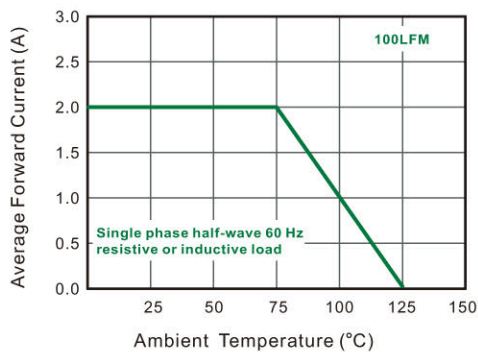


Fig.2 Typical Reverse Characteristics

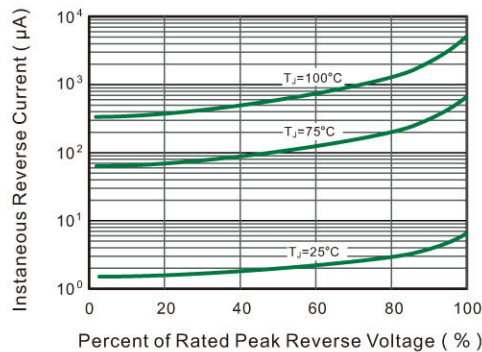


Fig.3 Typical Forward Characteristic

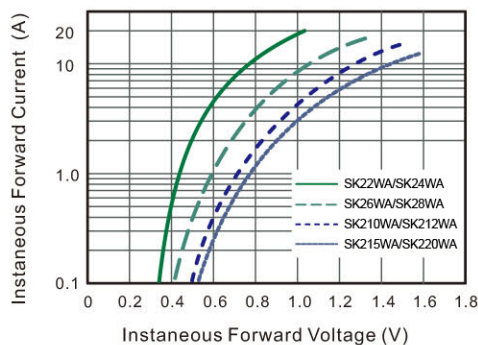


Fig.4 Typical Junction Capacitance

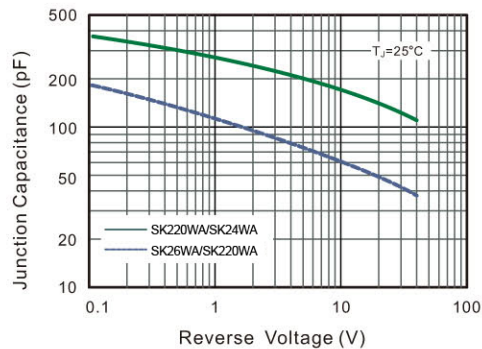
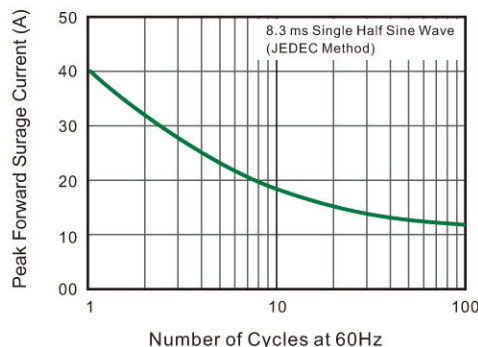


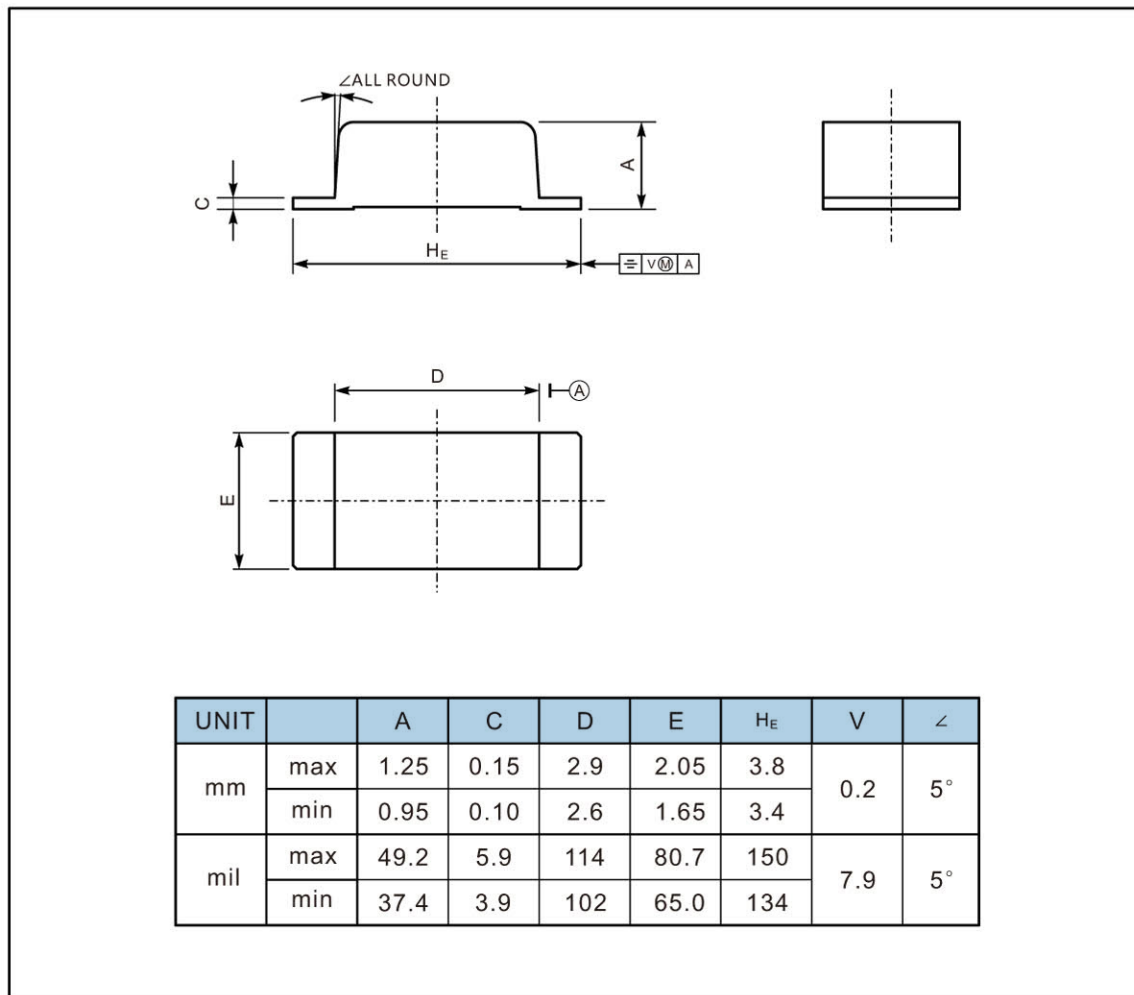
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



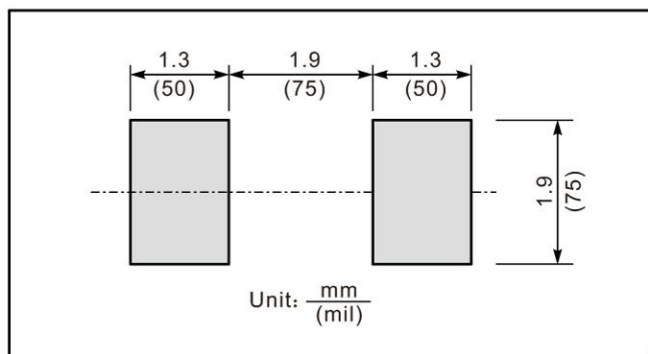
SK22WA-SK220WA

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

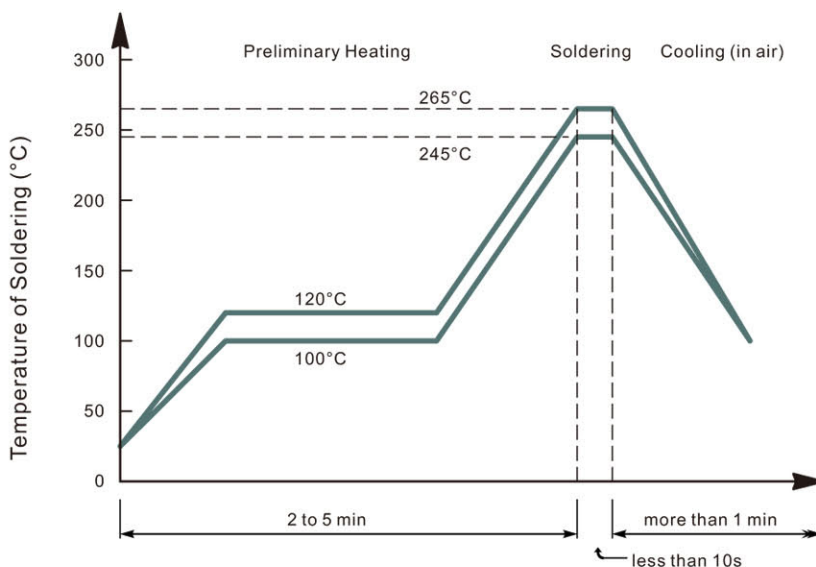


The recommended mounting pad size

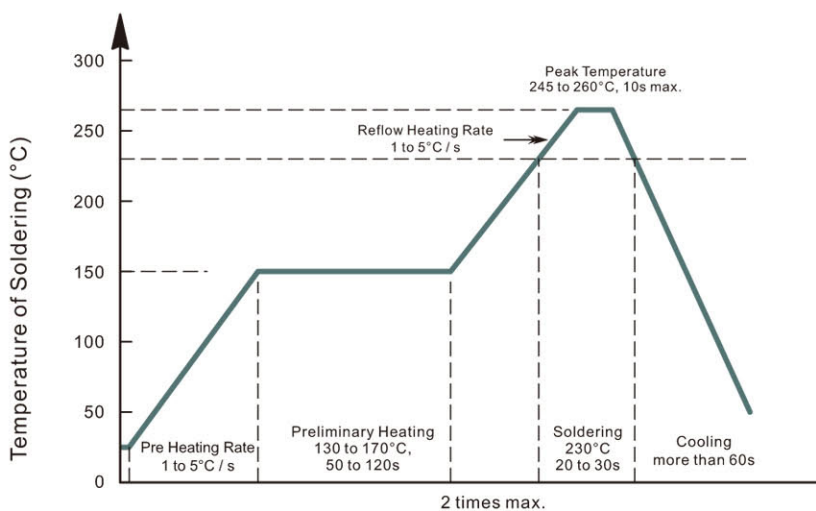


SK22WA-SK220WA

• 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)