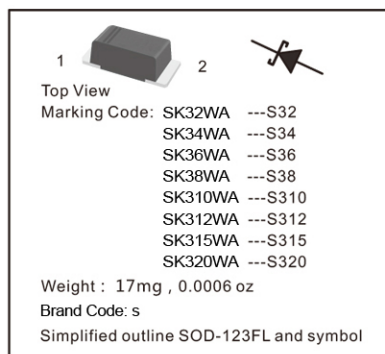


**SK32WA THRW SK320WA** CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

Surface Mount Schottky Barrier Rectifier  
 Reverse Voltage - 20 to 200 V  
 Forward Current - 3.0A

● 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	SK32WA	SK34WA	SK36WA	SK38WA	SK310WA	SK312WA	SK315WA	SK320WA	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	$I_{F(AV)}$	3.0								A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80								A
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.55	0.70		0.85		0.95		V	
Maximum DC Reverse Current $T_a = 25^\circ\text{C}$ at Rated DC Reverse Voltage $T_a = 100^\circ\text{C}$	$I_R$	0.5 10	0.3 5				mA			
Typical Junction Capacitance <sup>1)</sup>	$C_j$	250	160							pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	40								°C/W
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.

2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



Fig.1 Forward Current Derating Curve

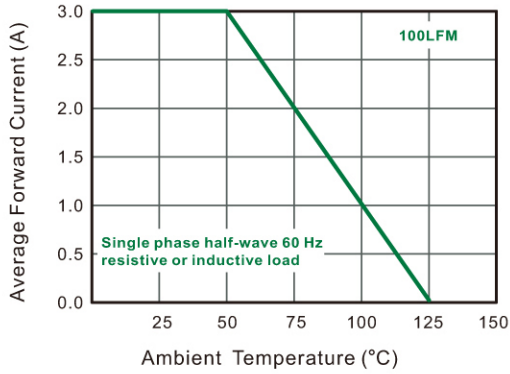


Fig.2 Typical Reverse Characteristics

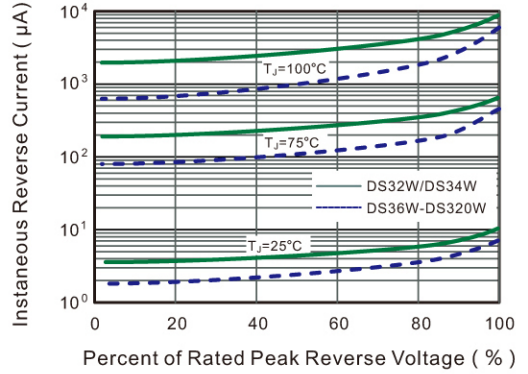


Fig.3 Typical Forward Characteristic

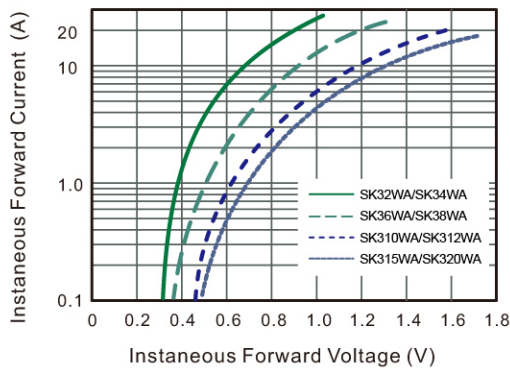


Fig.4 Typical Junction Capacitance

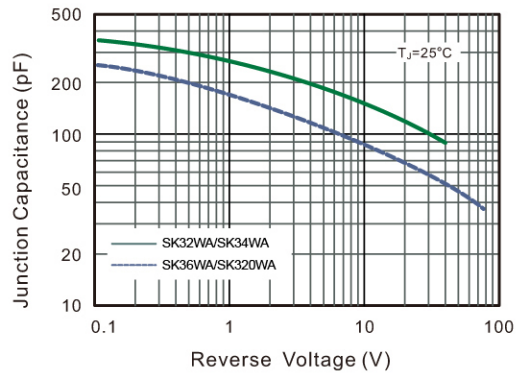


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

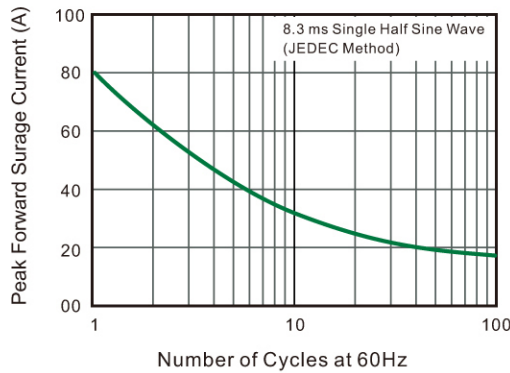
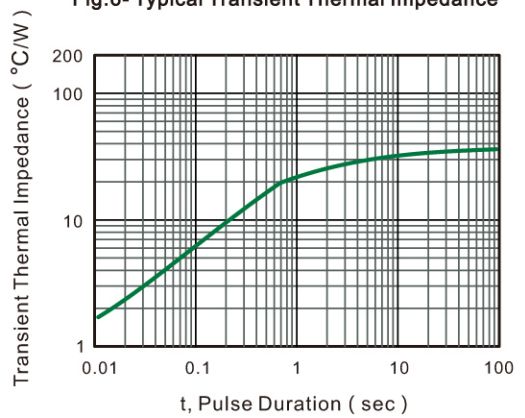


Fig.6- Typical Transient Thermal Impedance

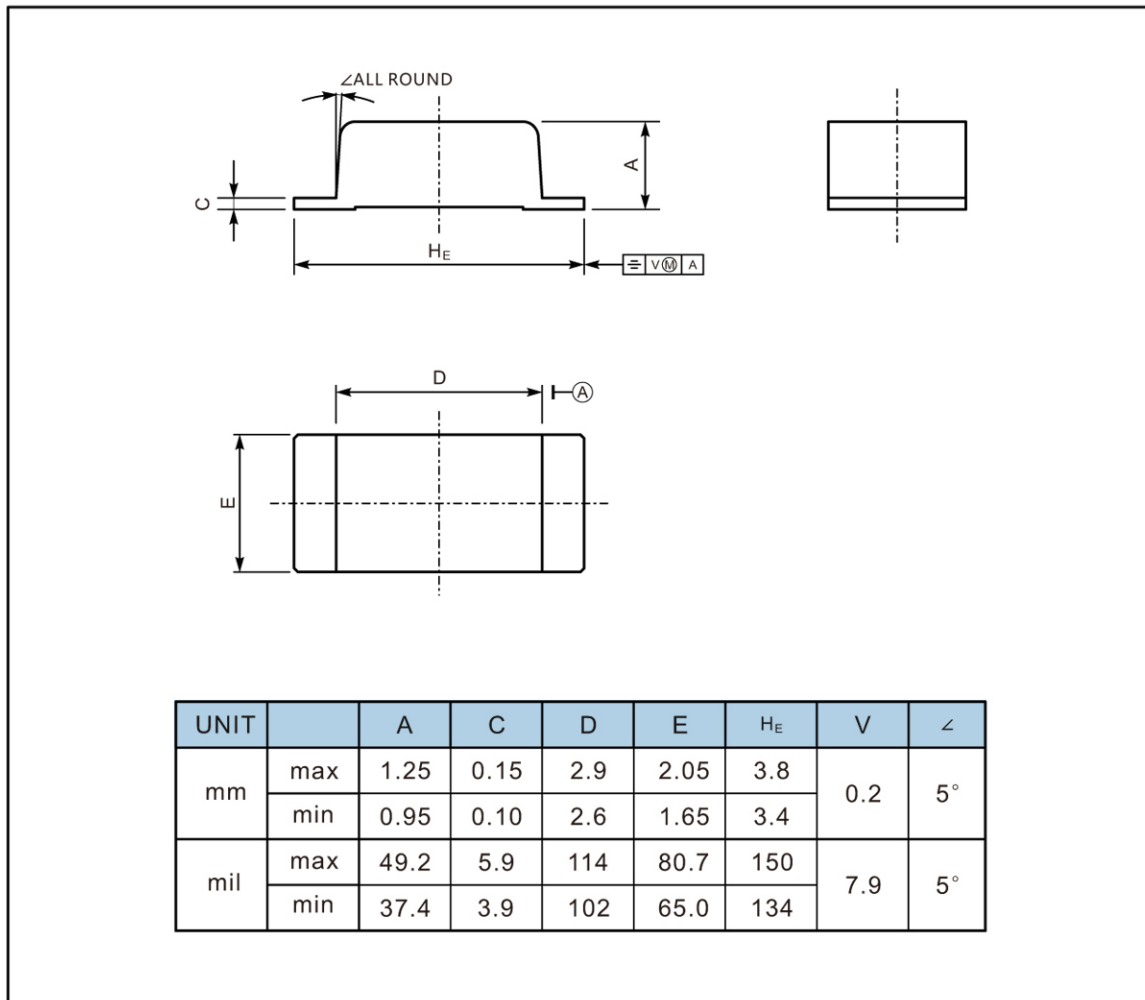


**SK32WA THRW SK320WA** CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

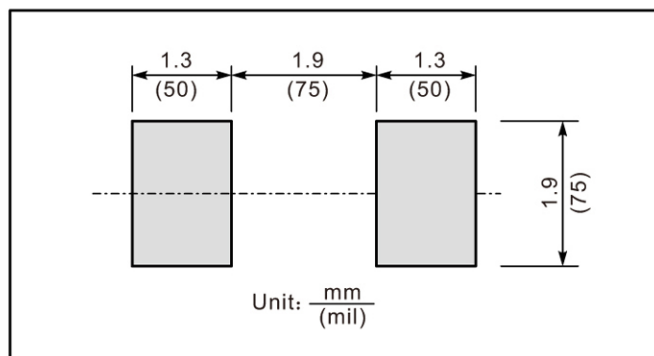
**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

S0D1237L



**The recommended mounting pad size**

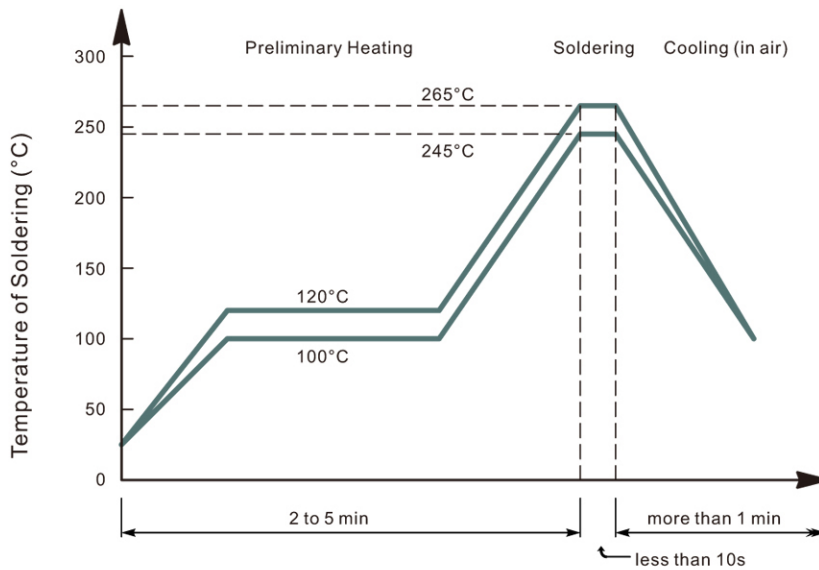


**Marking**

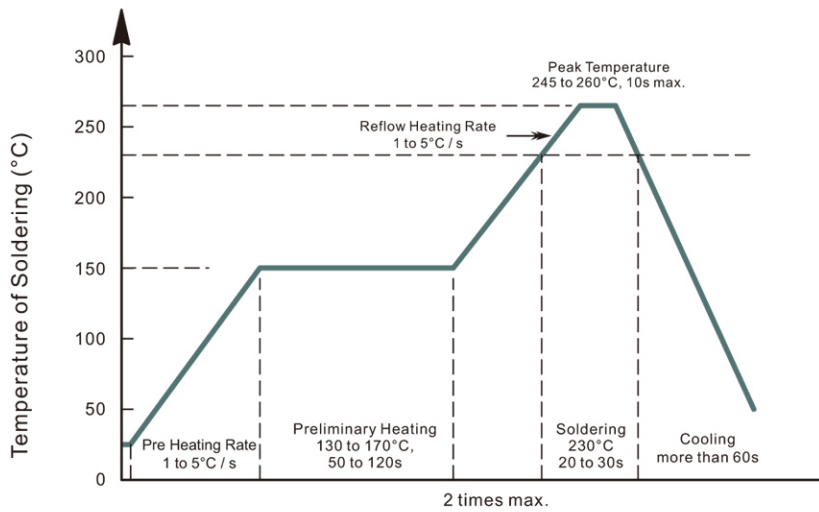
Type number	Marking code
SK32WA	S32
SK34WA	S34
SK36WA	S36
SK38WA	S38
SK310WA	S310
SK312WA	S312
SK315WA	S315
SK320WA	S320



• 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)

