

# SK32U THRU SK325U

3.0 AMP Surface Mount Schottky Barrier Rectifiers

#### **Features**

- · Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- · For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0

#### **Mechanical Data**

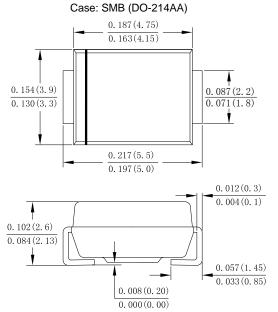
Case: Molded plastic SMB

 Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed

Polarity: Color band dentes cathode end

Mounting Position: Any

Making: Type Number



Dimensions in inches and (millimeters)

### **Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SK 32U	SK 33U	SK 34U	SK 345U	SK 35U	SK 36U	SK 38U		SK 315U	SK 320U	SK 325U	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	45	50	60	80	100	150	200	250	٧
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	31	35	42	56	70	105	140	175	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	45	50	60	80	100	150	200	250	V
Average Rectified Output Current @T <sub>L</sub> =100°C	<b>I</b> F(AV)	3.0											Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	<b> </b> FSM	90											А
Forward Voltage @IF=3.0A (Note 1)	V <sub>FM</sub>	0.5			0	.67	0.	.8 0.9		0	0.92	V	
Peak Reverse Current @TA =25°C		0.1 0.05									mA		
At Rated DC Blocking Voltage @T <sub>A</sub> =100 °C	l <sub>R</sub>	10						5					
I <sup>2</sup> t Rating for fusing (t <8.3ms)	l <sup>2</sup> t	33.61											$A^2s$
Typical Junction Capacitance	Сл	140 80								рF			
Typical Thermal Resistance (Note 2)	Re JA	85											°C/W
Operating Temperature Range(Note3)	TJ	-55 to+150											$^{\circ}\!\mathbb{C}$
Storage Temperature Range	Тѕтс	-55 to +150											$^{\circ}$

#### Note:

- 1.Pulse Test with PW=300usec,1%Duty Cycle.
- 2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
- 3. Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

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Fig. 1 Forward Current Derating Curve

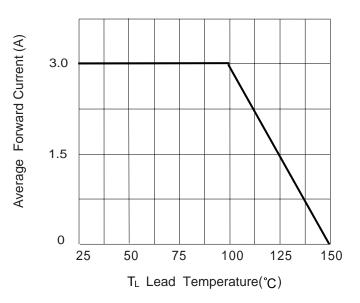


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

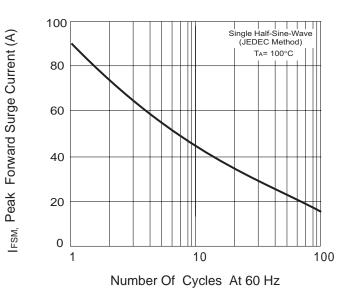


Fig.5 Mounting PAD Layout

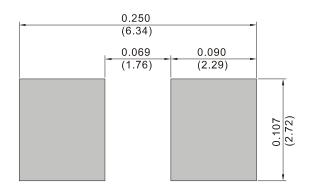


Fig. 2 Typ. Forward Characteristics

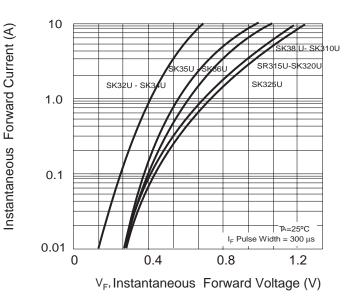
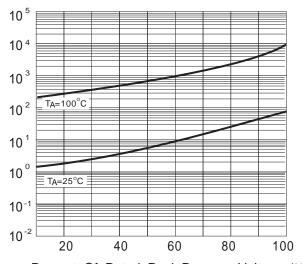


Fig.4 Typical Reverse Chracteristics



Instantaneous Reverse Current (uA)

Percent Of Rated Peak Reverse Voltage (%)

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