

## **SK32U(H) THRU SK325U(H)**

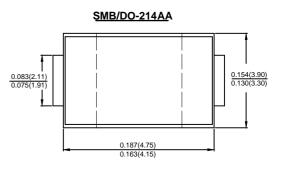
### 3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

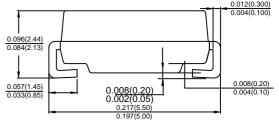
#### **Features**

- · 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





## **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%

For capacitive load defate current by 20 /0	_												
Type Number (Note 4)	SYMBOL	SK 32U (H)	SK 33U (H)	SK 34U (H)	SK 345U (H)	SK 35U (H)	SK 36U (H)	SK 38U (H)	310U	SK 315U (H)	SK 320U (H)	SK 325U (H)	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	٧
Maximum DC Blocking Voltage	VDC	20	30	40	45	50	60	80	100	150	200	250	٧
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)	İFSM	90										Α	
Forward Voltage @IF=3.0A (Note 1)	V <sub>FM</sub>	0.5			0	.67	0.8		0.90		0.92	٧	
Peak Reverse Current @Ta =25°C			0.1					0.05					A
At Rated DC Blocking Voltage @T <sub>A</sub> =100°C	- I <sub>R</sub>	10						5					mA
I <sup>2</sup> t Rating for fusing (t <8.3ms)	I <sup>2</sup> t	33.61											$A^2s$
Typical Junction Capacitance	Сı	140 80								pF			
Typical Thermal Resistance (Note 2)	Rθ JA	70										°C/W	
Operating Temperature Range(Note3)	TJ	-55 to+150											$^{\circ}$ C
Storage Temperature Range	Тѕтс	-55 to +150										$^{\circ}$ C	

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.
- 4."H":Halogen Free.



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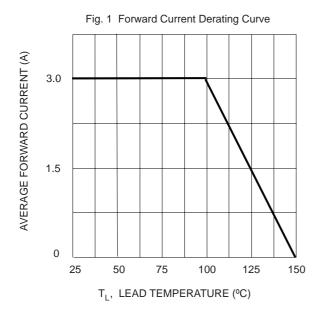


Fig. 2 Typ. Forward Characteristics

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SK38 U- SK310U
SK32U - SK32U
SK32U - SK32U
SK32U - SK32U
SK32EU

SK32EU

SK32EU

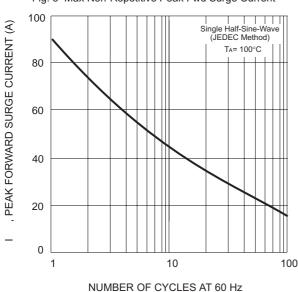
SK32EU

SK32EU

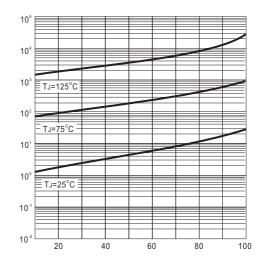
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V<sub>F</sub>, INSTANTANEOUS FWD VOLTAGE (V)



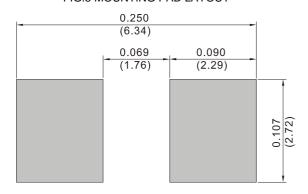


#### FIG.4TYPICALREVERSE CHRACTERISTIC



PERCENT OF RATED PEAK REVERSE VOLTAGE ,  $\!\%$ 

### FIG.5 MOUNTING PAD LAYOUT



REVERSE CURRENT (uA)



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