

## SK52U THRU SK525U

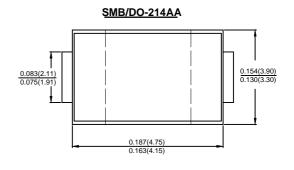
#### 5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

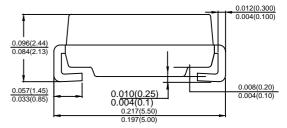
#### **Features**

- · 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 52U	SK 53U	SK 54U	SK 545U	SK 55U	SK 56U	SK 58UI		SK 515U	SK 520U	SK 525U	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	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∟ =100°C	<b>I</b> F(AV)	5.0											Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İfsm	110											Α
Forward Voltage @IF=5.0A (Note 1)	V <sub>FM</sub>	0.5			0	.67	0.8 0.		9	0.92	٧		
Peak Reverse Current @T <sub>A</sub> =25°C		0.1 0.05										m ^	
At Rated DC Blocking Voltage @T <sub>A</sub> =100 °C	- IR	10						5					mA
I <sup>2</sup> t Rating for fusing (t <8.3ms)	I <sup>2</sup> t	50.21											$A^2s$
Typical Junction Capacitance (Note 2)	Сл	12											pF
Typical Thermal Resistance per leg (Note 3)	Re ja	65											°C/W
Operating Temperature Range	TJ	-55 to+150											$^{\circ}$
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.

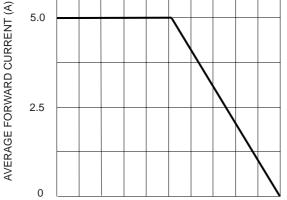


25

50

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Fig. 1 Forward Current Derating Curve

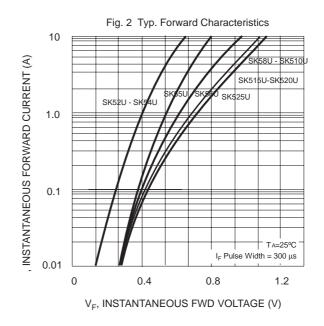


75

100

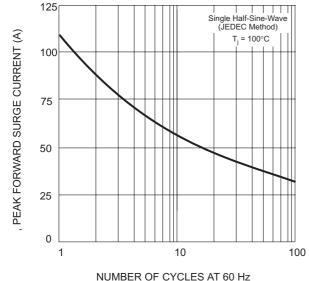
125

150

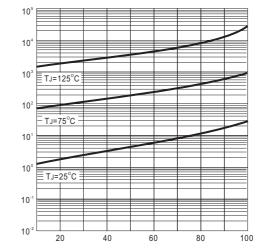




 $T_L$ , LEAD TEMPERATURE (°C)

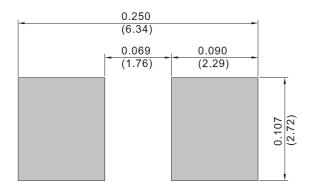


## FIG.4TYPICALREVERSE CHRACTERISTIC









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REVERSE CURRENT (uA)



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