

SK52 THRU SK525

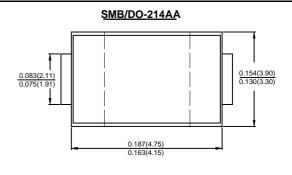
5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

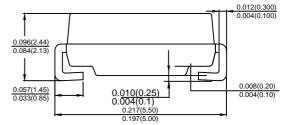
Features

- · 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 52	SK 53	SK 54	SK 545	SK 55	SK 56	SK 58	SK 510	SK 515	SK 520	SK 525	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	٧
Maximum RMS Voltage	V _{RMS}	14	21	28	31	35	42	56	70	105	140	175	٧
Maximum DC Blocking Voltage	V _{DC}	20	30	40	45	50	60	80	100	150	200	250	٧
Average Rectified Output Current @T∟ =100°C	lf(AV)	5.0											А
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İfsm	100											А
Forward Voltage @IF=5.0A (Note 1)	V _{FM}	0.55			0).7	0.8	85	0.92	2	0.95	٧	
Peak Reverse Current @T _A =25°C		0.1 0.05											Л
At Rated DC Blocking Voltage @T _A =100 °C	- IR	10						5					mA
I ² t Rating for fusing (t <8.3ms)	I ² t	41.5											A ² s
Typical Junction Capacitance (Note 2)	Сл	12											pF
Typical Thermal Resistance per leg (Note 3)	Rθ JA	65											°C /W
Operating Temperature Range	TJ	-55 to+150											$^{\circ}$ 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.

version:02 1 of 3 www.dyelec.com



SK52 THRU SK525

Fig. 1 Forward Current Derating Curve

5.0

2.5

25

50

75

100

125

150

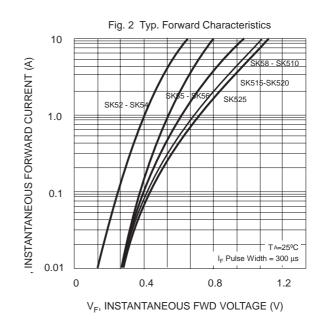


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

 T_L , LEAD TEMPERATURE (°C)

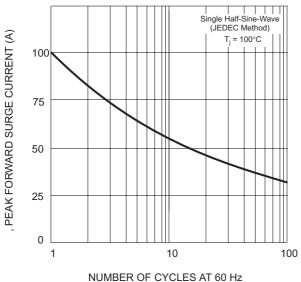


FIG.4TYPICALREVERSE CHRACTERISTIC

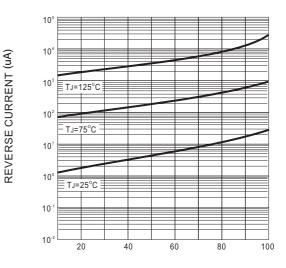
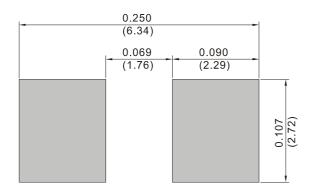


FIG.5 MOUNTING PAD LAYOUT



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

version:02 2 of 3 www.dyelec.com



SK52 THRU SK525

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