

**5.0Amp Surface Mounted Schottky Barrier Rectifiers**

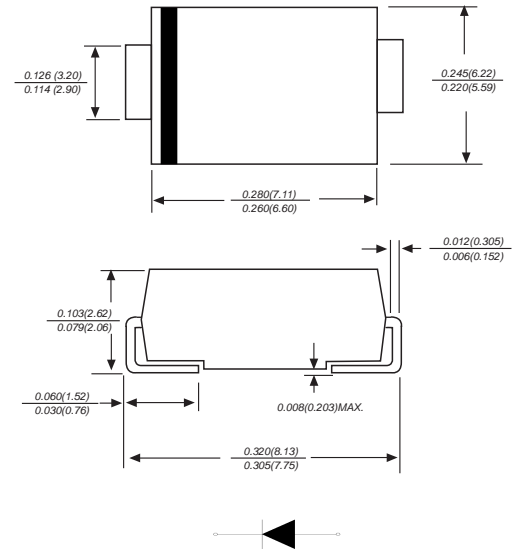
**Features**

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Built-in strain relief,ideal for automated placement
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C/10 seconds at terminals

**Mechanical Data**

- Case** : Molded plastic body  
**Terminals** : Solder plated, solderable per MIL-STD-750,Method 2026  
**Polarity** : Polarity symbol marking on body  
**Mounting Position** : Any  
**Weight** : 0.008 ounce, 0.225 grams

**DO-214AB/SMC**



Dimensions in inches and (millimeters)

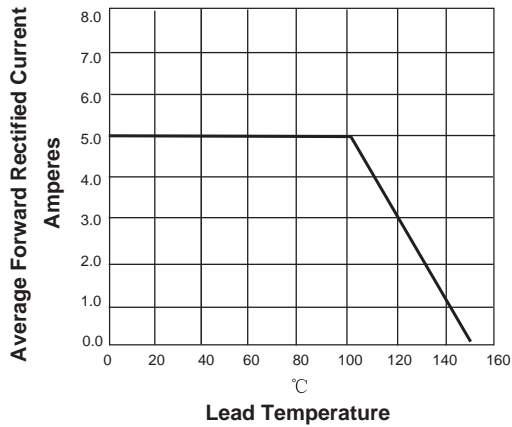
**Maximum Ratings And Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

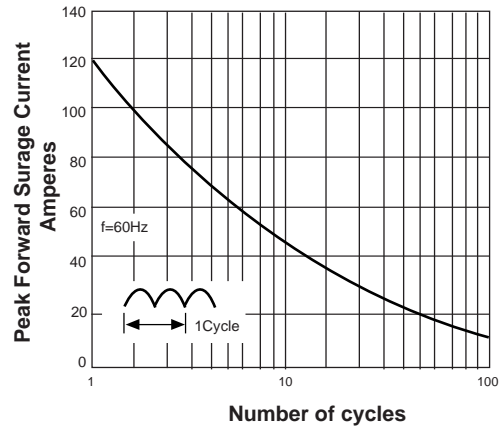
Parameter	SYMBOLS	SK52	SK54	SK56	SK58	SK510	SK515	SK520	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T <sub>L</sub> =100°C	I <sub>(AV)</sub>	5.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120.0							A
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.55	0.68	0.85	0.95				V
Maximum DC reverse current at rated DC blocking voltage T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	0.15 50			0.05 10			mA	
Typical thermal resistance	R <sub>qJA</sub>	45.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150							°C
Storage temperature range	T <sub>STG</sub>	-55 to +150							°C

**Ratings And Characteristic Curves**

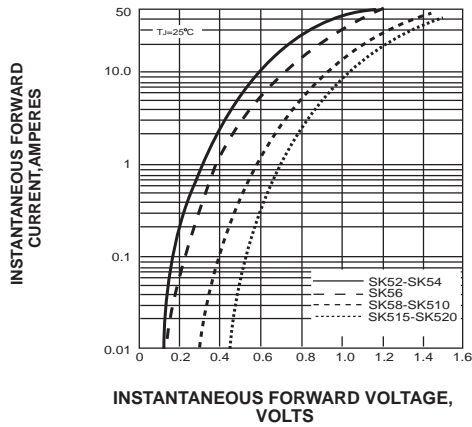
**FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT**



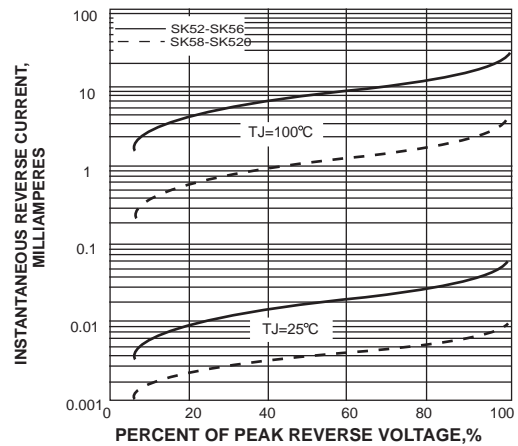
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



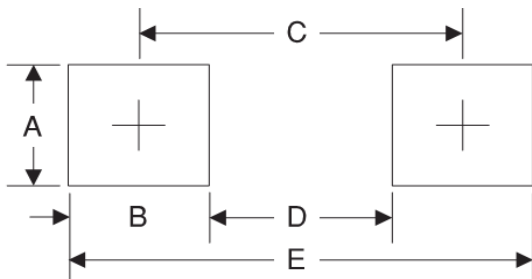
**FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS**

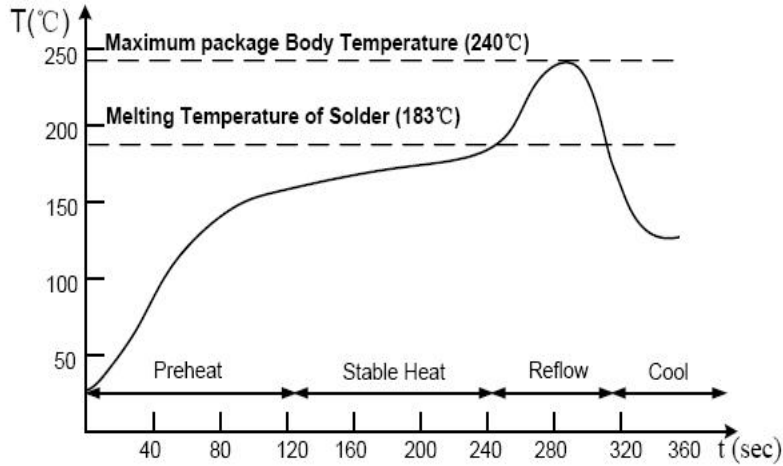


**Suggested Pad Layout**



Symbol	Unit (mm)	Unit (inch)
A	3.30	0.130
B	2.50	0.098
C	6.80	0.268
D	4.40	0.173
E	9.40	0.370

**Suggested Soldering Temperature Profile**

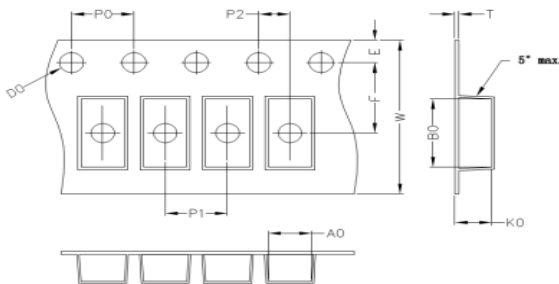


**Note**

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

**Package Information**

**Carrier Dimension(mm)**



<b>A0</b>	<b>B0</b>	<b>K0</b>	<b>D0</b>	<b>E</b>	<b>F</b>
6.05	8.31	2.54	1.55	1.75	7.50
<b>P0</b>	<b>P1</b>	<b>P2</b>	<b>T</b>	<b>W</b>	<b>Tolerance</b>
4.0	8.0	2.0	0.25	16	0.1

**Package Specifications**

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
SMC	13'	330	3.0	340	6.0	360*360*360	48