

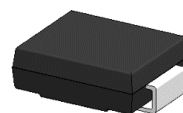
## 5A,200V Schottky Barrier Rectifier

### Features

- Low leakage current
- Schottky barrier diode
- Low forward voltage drop
- Moisture sensitivity: level 1, per J-STD-020
- Halogen-free according to IEC 61249-2-21 definition
- High temperature soldering guaranteed: 260°C/10 seconds
- AEC-Q101 Qualified



RoHS  
COMPLIANT



SMC (DO-214AB)

### Applications

For use in low voltage, high frequency inverters, free-wheeling and polarity protection application.

Maximum Ratings & Electrical Characteristics (T <sub>A</sub> =25°C unless otherwise noted)			
Parameter	Symbol	ASK5C0C	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	V
Maximum RMS voltage	V <sub>RMS</sub>	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	5	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	120	A
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Thermal-Mechanical Specifications (T <sub>A</sub> =25°C unless otherwise noted)			
Parameter	Symbol	Typ	Unit
Thermal Resistance, Junction to Ambient	R <sub>thJA</sub>	65	°C / W
Thermal Resistance, Junction to Case	R <sub>thJC</sub>	10	°C / W
Thermal Resistance, Junction to Lead	R <sub>thJL</sub>	15	°C / W

Electrical Specifications( $T_A=25^{\circ}\text{C}$ unless otherwise noted)				
Parameter	Symbol	Test Conditions	ASK5C0C	Unit
Maximum forward drop voltage	$V_F$	$I_F=5\text{A}$	0.85	V
Maximum reverse leakage current @ $V_R$	$I_R$	$T_J=25^{\circ}\text{C}$	30	$\mu\text{A}$
		$T_J=125^{\circ}\text{C}$	1000	
Typical junction capacitance	$C_J$	$V_R=4.0\text{V}, f=1\text{MHZ}$	96	pF

Note:

1. Mounted on copper pad area of 8.0 x 8.0mm to each terminal.

## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

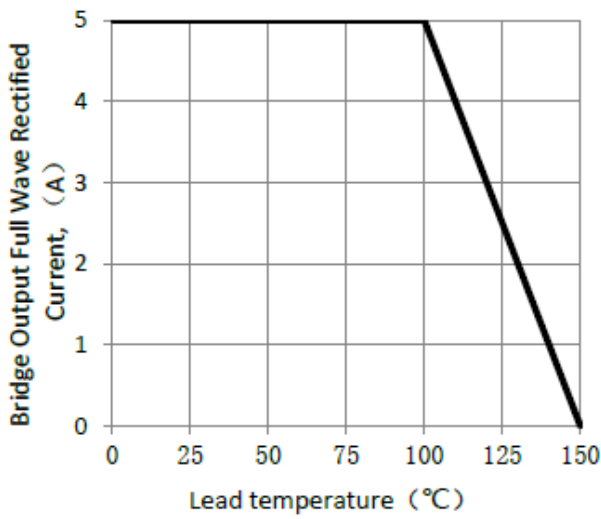


Figure 1. Forward Current Derating Curve

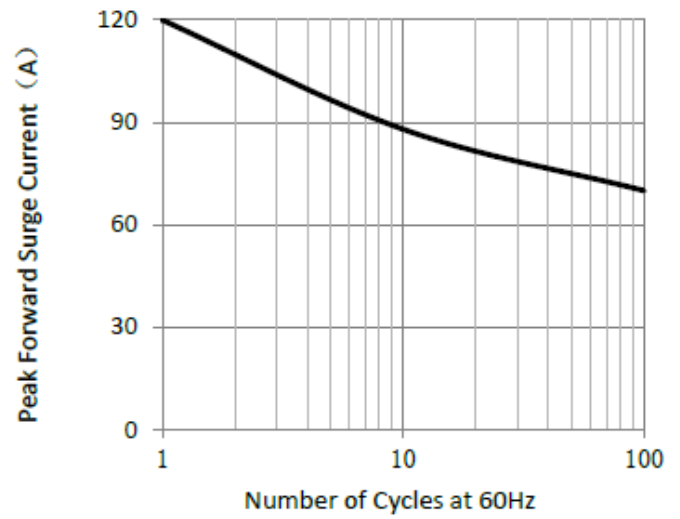


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

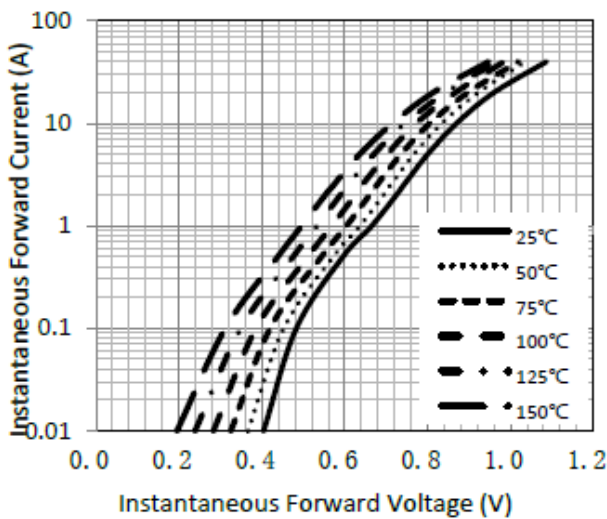


Figure 3. Typical Instantaneous Forward Characteristics

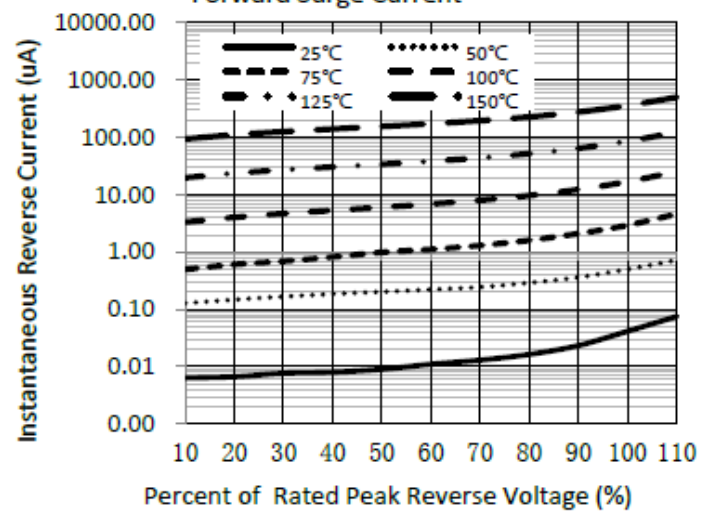
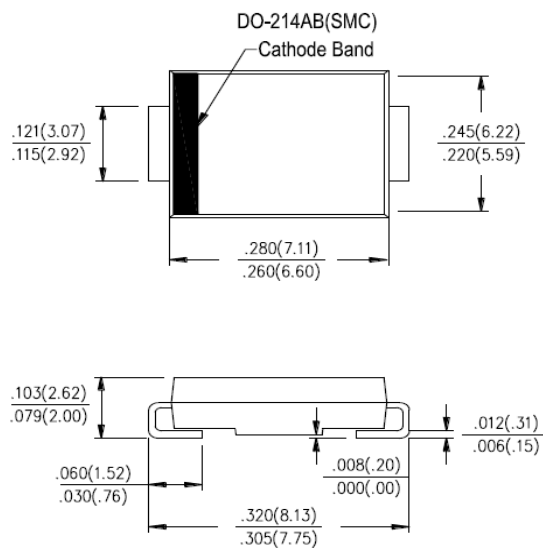


Figure 4. Typical Reverse Characteristics

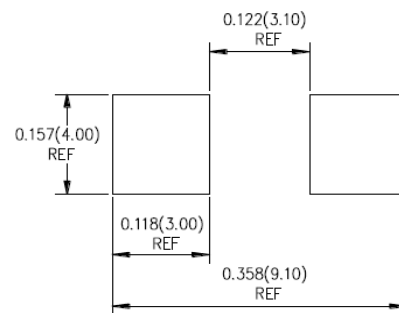
## Package Outline Dimensions

in inches (millimeters)

### SMC (DO-214AB)



Mounting Pad Layout



## **Disclaimers**

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