

## 2A, 100V Surface Mount Schottky Barrier Rectifier

### FEATURES

- Low power loss, high efficiency
- Ideal for automated placement
- Guardring for overvoltage protection
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC



### MECHANICAL DATA

**Case:** DO-214AA (SMB)

**DO-214AA (SMB)**

Molding compound, UL flammability classification rating 94V-0

Moisture sensitivity level: level 1, per J-STD-020

Part no. with suffix "H" means AEC-Q101 qualified

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

**Polarity:** Indicated by cathode band

**Weight :** 90 mg (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	SSH210	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	V
Maximum RMS voltage	$V_{RMS}$	70	V
Maximum DC blocking voltage	$V_{DC}$	100	V
Maximum average forward rectified current	$I_{F(AV)}$	2	A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	75	A
Peak repetitive reverse surge current at $tp=2\mu\text{s}$ , 1kHz	$I_{RRM}$	1	A
Maximum instantaneous forward voltage (Note 1) $I_F = 2\text{ A} @ 25^\circ\text{C}$ $I_F = 2\text{ A} @ 125^\circ\text{C}$	$V_F$	0.79 0.65	V
Voltage rate of change (Rated $V_F$ )	$dV/dt$	10000	$\text{V}/\mu\text{s}$
Maximum reverse current @ rated $V_F$ $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	1	$\mu\text{A}$
		1	mA
Typical thermal resistance	$R_{\theta JL}$	24	$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	- 55 to +175	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	- 55 to +175	$^\circ\text{C}$

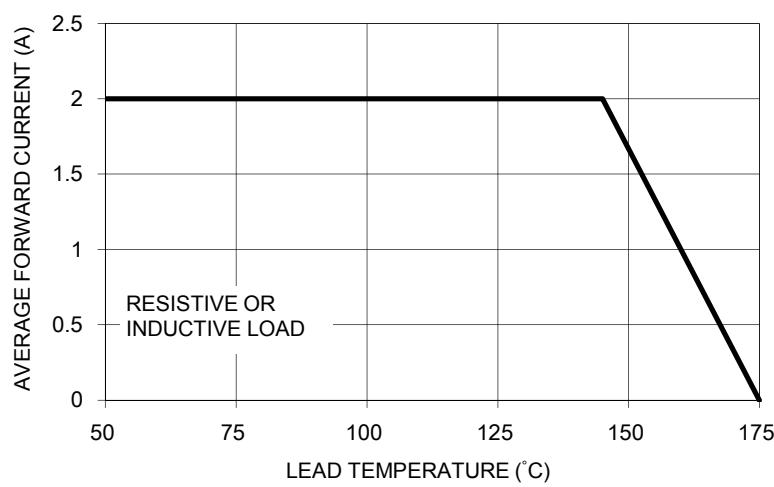
Note 1: Pulse test with  $PW=300\mu\text{s}$ , 1% duty cycle

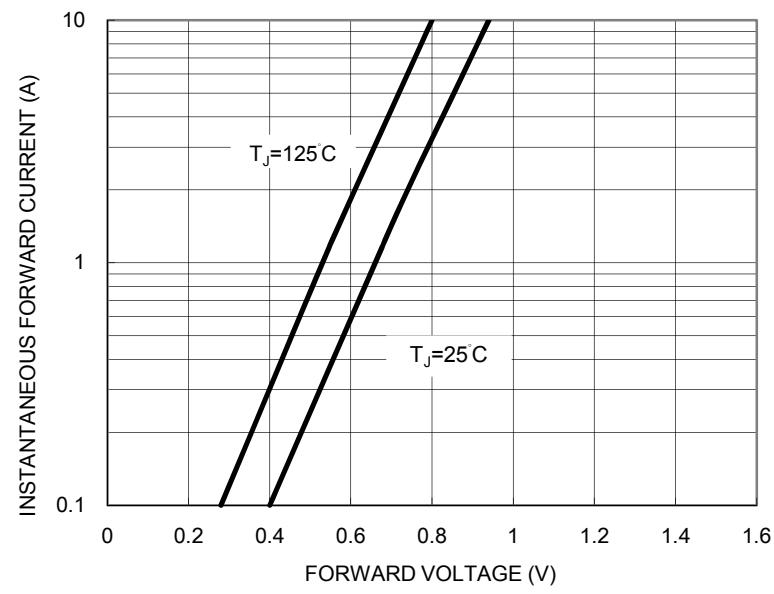
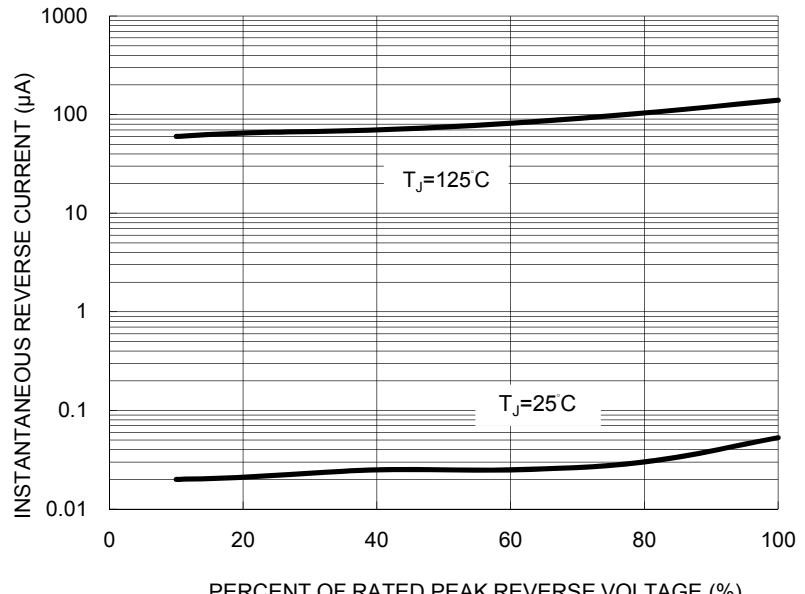
**ORDERING INFORMATION**

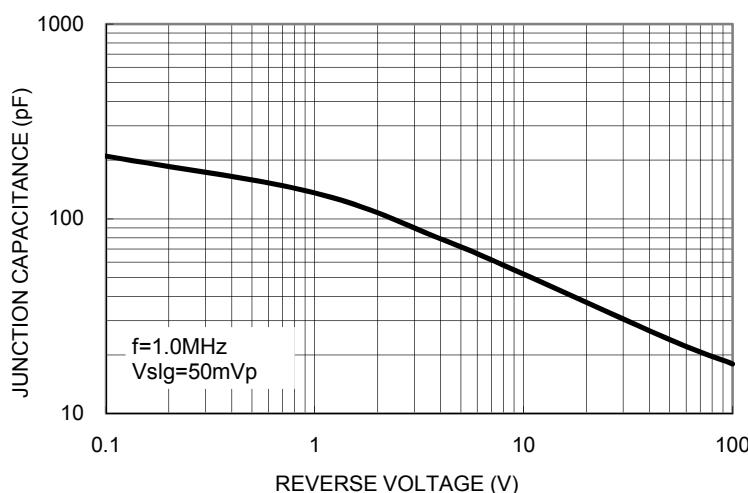
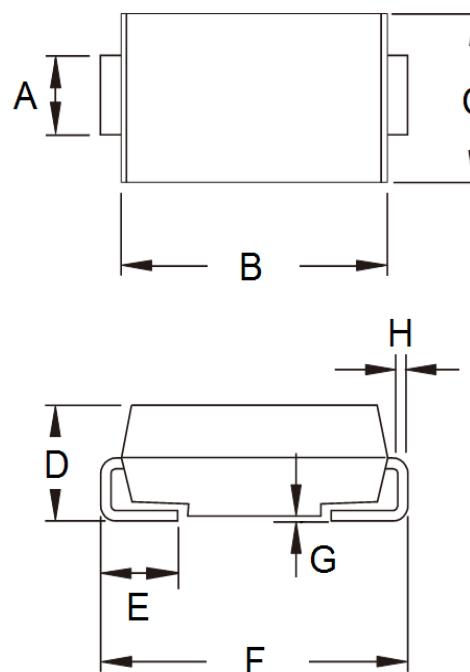
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKAGE	PACKING
SSH210	H	R5	SMB	850 / 7" Plastic reel
		R4	SMB	3,000 / 13" Paper reel
		M4	SMB	3,000 / 13" Plastic reel

**EXAMPLE**

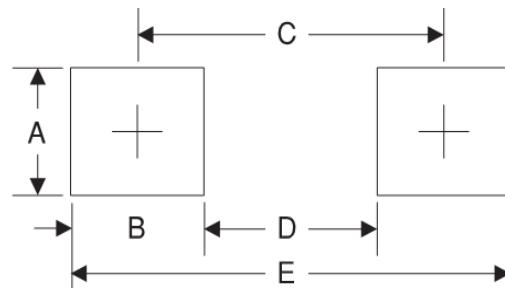
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	DESCRIPTION
SSH210HR5	SSH210	H	R5	AEC-Q101 qualified

**RATINGS AND CHARACTERISTICS CURVES**
 $(T_A=25^\circ\text{C} \text{ unless otherwise noted})$ 
**FIG.1 FORWARD CURRENT DERATING CURVE**

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

**FIG. 3 TYPICAL FORWARD CHARACTERISTICS**

**FIG. 4 TYPICAL REVERSE CHARACTERISTICS**


**FIG. 5 TYPICAL JUNCTION CAPACITANCE**

**PACKAGE OUTLINE DIMENSIONS**
**DO-214AA (SMB)**


DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.95	2.10	0.077	0.083
B	4.25	4.75	0.167	0.187
C	3.48	3.73	0.137	0.147
D	1.99	2.61	0.078	0.103
E	0.90	1.41	0.035	0.056
F	5.10	5.30	0.201	0.209
G	0.10	0.20	0.004	0.008
H	0.15	0.31	0.006	0.012

**SUGGESTED PAD LAYOUT**


Symbol	Unit (mm)	Unit (inch)
A	2.3	0.091
B	2.5	0.098
C	4.3	0.169
D	1.8	0.071
E	6.8	0.268

**MARKING DIAGRAM**


P/N = Specific Device Code  
 YW = Date Code  
 F = Factory Code

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