

2A, 100V Schottky Barrier Surface Mount Rectifier

FEATURES

- Low power loss, high efficiency
- Ideal for automated placement
- Guard ring for overvoltage protection
- High surge current capability
- Moisture sensitivity level: level 1, per J-STD-020
- RoHS Compliant
- Halogen-free according to IEC 61249-2-21

APPLICATIONS

- Switching mode power supply (SMPS)
- Adapters
- Monitor
- TV

MECHANICAL DATA

- Case: DO-214AA (SMB)
- Molding compound meets UL 94V-0 flammability rating
- Terminal: Matte tin plated leads, solderable per J-STD-002
- Meet JESD 201 class 2 whisker test
- · Polarity: Indicated by cathode band
- Weight: 0.090g (approximately)

KEY PARAMETERS			
PARAMETER	VALUE	UNIT	
I _F	2	Α	
V_{RRM}	100	V	
I _{FSM}	75	Α	
T _{J MAX}	175	°C	
Package	DO-214AA (SMB)		
Configuration	Single die		









DO-214AA (SMB)



PARAMETER	SYMBOL	SSH210	UNIT
Marking code on the device		SSH210	
Repetitive peak reverse voltage	V_{RRM}	100	V
Reverse voltage, total rms value	V _{R(RMS)}	70	V
Forward current	I _F	2	А
Surge peak forward current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	75	А
Junction temperature	TJ	- 55 to +175	°C
Storage temperature	T _{STG}	- 55 to +175	°C

1



Taiwan Semiconductor

THERMAL PERFORMANCE			
PARAMETER	SYMBOL	TYP	UNIT
Junction-to-lead thermal resistance	R _{OJL}	24	°C/W

ELECTRICAL SPECIFICATIONS (T _A = 25°C unless otherwise noted)					
PARAMETER	CONDITIONS	SYMBOL	TYP	MAX	UNIT
Forward voltage ⁽¹⁾	$I_F = 2A, T_J = 25^{\circ}C$	V _F	-	0.79	V
	I _F = 2A, T _J = 125°C		-	0.65	V
Reverse current @ rated V _R ⁽²⁾	T _J = 25°C	· I _R	-	1	μA
	T _J = 125°C		-	1	mA

Notes:

- 1. Pulse test with PW = 0.3ms
- 2. Pulse test with PW = 30ms

ORDERING INFORMATION			
ORDERING CODE	PACKAGE	PACKING	
SSH210	DO-214AA (SMB)	3,000 / Tape & Reel	



CHARACTERISTICS CURVES

(T_A = 25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

2.5 (V) LEAD TEMPERATURE (°C)

Fig.2 Typical Junction Capacitance

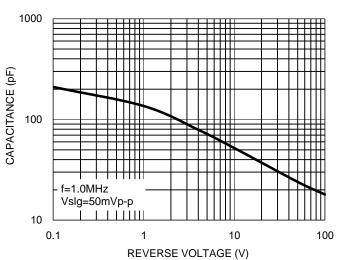


Fig.3 Typical Reverse Characteristics

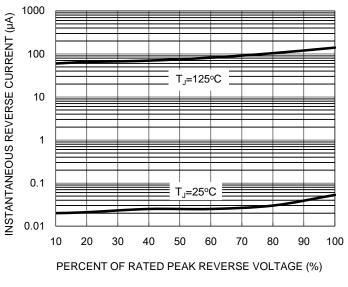
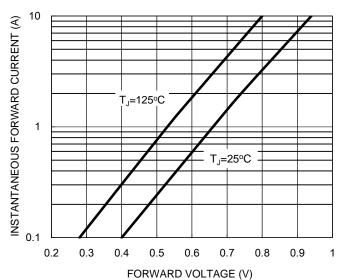


Fig.4 Typical Forward Characteristics

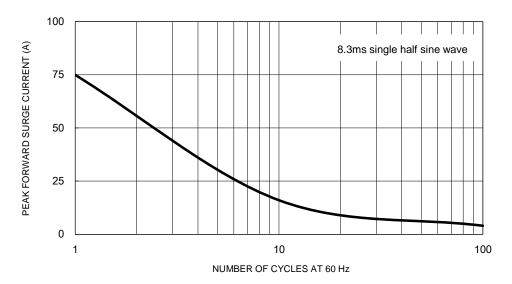




CHARACTERISTICS CURVES

 $(T_A = 25^{\circ}C \text{ unless otherwise noted})$

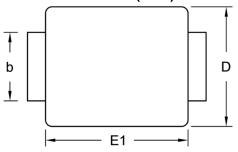
Fig.5 Maximum Non-Repetitive Forward Surge Current

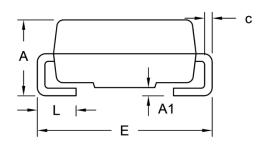




PACKAGE OUTLINE DIMENSIONS

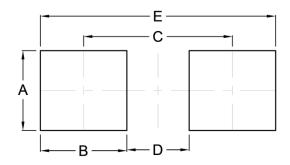
DO-214AA (SMB)





DIM.	Unit (mm)		Unit (nit (inch)	
Dilvi.	Min.	Max.	Min.	Max.	
Α	1.95	2.65	0.077	0.104	
A1	0.05	0.20	0.002	0.008	
b	1.95	2.20	0.077	0.087	
С	0.15	0.31	0.006	0.012	
D	3.30	3.95	0.130	0.156	
E	5.10	5.60	0.201	0.220	
E1	4.05	4.60	0.159	0.181	
L	0.75	1.60	0.030	0.063	

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
Α	2.30	0.091
В	2.50	0.098
С	4.30	0.169
D	1.80	0.071
E	6.80	0.268

MARKING DIAGRAM



P/N = Marking Code G = Green Compound

YW = Date Code F = Factory Code



Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Purchasers are solely responsible for the choice, selection, and use of TSC products and TSC assumes no liability for application assistance or the design of Purchasers' products.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by Taiwan Semiconductor manufacturer:

Other Similar products are found below:

MA4E2039 D1FH3-5063 MBR0530L-TP MBR10100CT-BP MBR1545CT MMBD301M3T5G RB160M-50TR RB551V-30

BAS16E6433HTMA1 BAT 54-02LRH E6327 NSR05F40QNXT5G NTE555 JANS1N6640 SB07-03C-TB-H SB1003M3-TL-W SK310-T

SK32A-LTP SK33A-TP SK34B-TP SS3003CH-TL-E GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G

SB007-03C-TB-E SK32A-TP SK33B-TP SK35A-TP SK38B-TP NRVBM120LT1G NTE505 NTSB30U100CT-1G SS15E-TP VS-6CWQ10FNHM3 ACDBA1100LR-HF ACDBA1200-HF ACDBA140-HF ACDBA2100-HF ACDBA3100-HF CDBQC0530L-HF

CDBQC0240LR-HF ACDBA340-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP MA4E2502L-1246 MA4E2502H-1246

NRVBM120ET1G NSR01L30MXT5G NTE573