THERMAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	2.35	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient (Note 1)	53	°C/W

1. Device is mounted on FR−4 PCB 0.013 mm.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Symbol	Parameter	Conditions	Value							Unit
			S2A	S2B	S2D	S2G	S2J	S2K	S2M	
V_F	Maximum Forward Voltage	I_F = 2.0 A	1.15							V
t_{rr}	Typical Reverse−Recovery Time	I_F = 0.5 A, I_R = 1.0 A, I_{rr} = 0.25 A	2.0							μs
I_R	Maximum Reverse Current at Rated V_R	T_A = 25°C	1.0							μA
		T_A = 125°C	125							
C_T	Typical Total Capacitance	V_R = 4.0 V, f = 1.0 MHz	30							pF

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

ORDERING INFORMATION

Part Number	Marking	Package	Shipping†
S2A, NRVS2A*	S2A	SMB (Pb−Free)	3000 / Tape & Reel
S2B, NRVS2B*	S2B		
S2D, NRVS2D*	S2D		
S2G, NRVS2G*	S2G		
S2J, NRVS2J*	S2J		
S2K, NRVS2K*	S2K		
S2M, NRVS2M*	S2M		

†For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

*NRV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC−Q101 Qualified and PPAP Capable.

TYPICAL PERFORMANCE CHARACTERISTICS

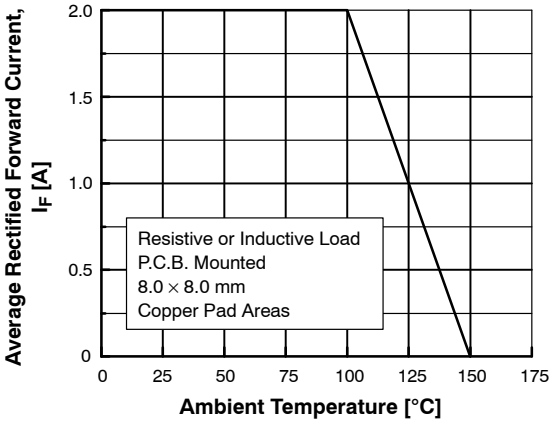


Figure 1. Forward Current Derating Curve

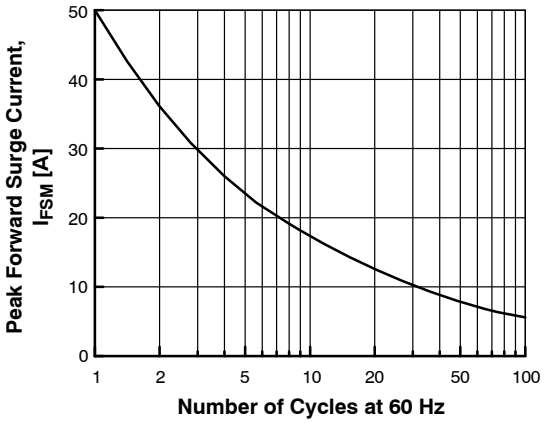


Figure 2. Non−Repetitive Surge Current

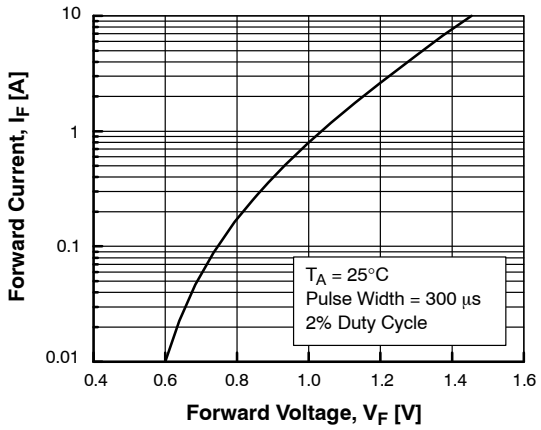


Figure 3. Forward Voltage Characteristics

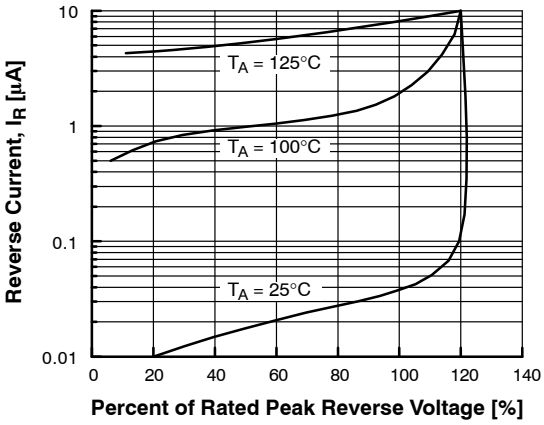


Figure 4. Reverse Current vs. Reverse Voltage

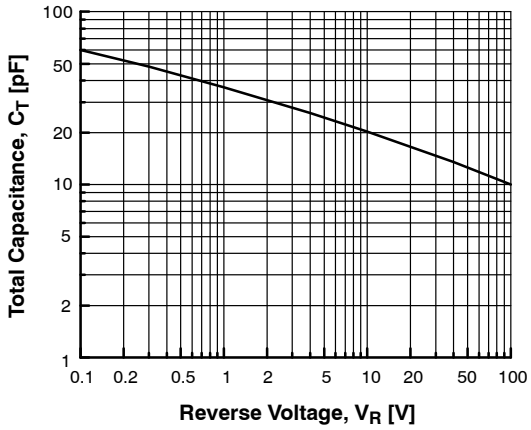
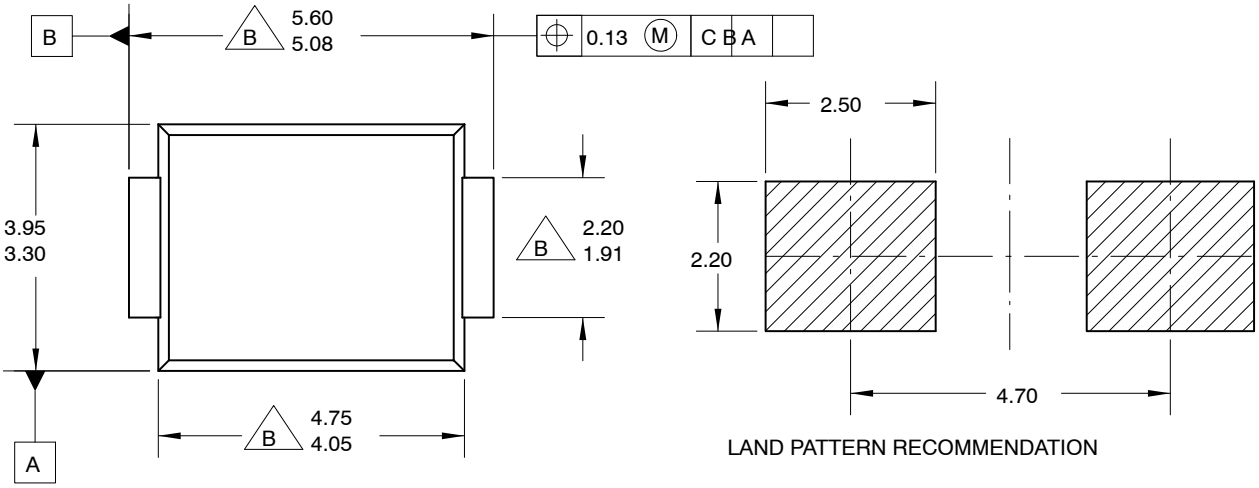


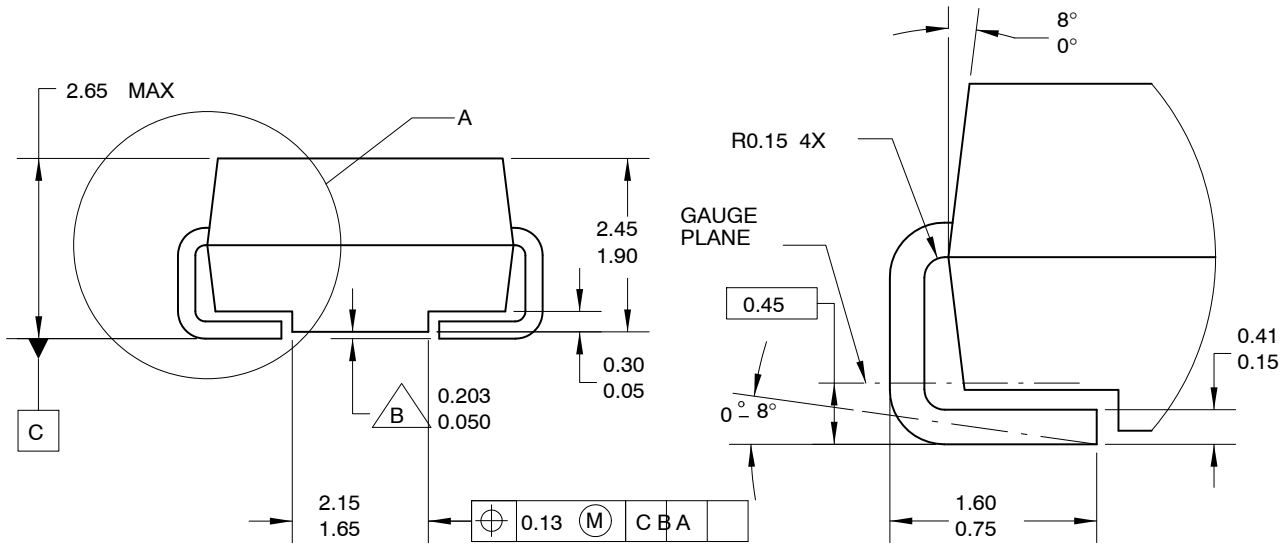
Figure 5. Total Capacitance

SMB
CASE 403AF
ISSUE O

DATE 31 AUG 2016



LAND PATTERN RECOMMENDATION



DETAIL A
SCALE 20 : 1

NOTES:

A. EXCEPT WHERE NOTED CONFORMS TO JEDEC DO214 VARIATION AA.
B DOES NOT COMPLY JEDEC STD. VALUE.
C. ALL DIMENSIONS ARE IN MILLIMETERS.
D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH AND TIE BAR PROTRUSIONS.
E. DIMENSION AND TOLERANCE AS PER ASME Y14.5–1994.
F. LAND PATTERN STD. DIOM5336X240M.

DOCUMENT NUMBER:	**98AON13441G**	Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.
DESCRIPTION:	**SMB**	**PAGE 1 OF 1**

PUBLICATION ORDERING INFORMATION

LITERATURE FULFILLMENT:
Email Requests to: orderlit@onsemi.com

ON Semiconductor Website: www.onsemi.com

TECHNICAL SUPPORT
North American Technical Support:
Voice Mail: 1 800−282−9855 Toll Free USA/Canada
Phone: 011 421 33 790 2910

Europe, Middle East and Africa Technical Support:
Phone: 00421 33 790 2910
For additional information, please contact your local Sales Representative

◊