

S2A–S2M

THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ 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	$^\circ\text{C}/\text{W}$

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

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

Symbol	Parameter	Conditions	Value						Unit
			S2A	S2B	S2D	S2G	S2J	S2K	
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

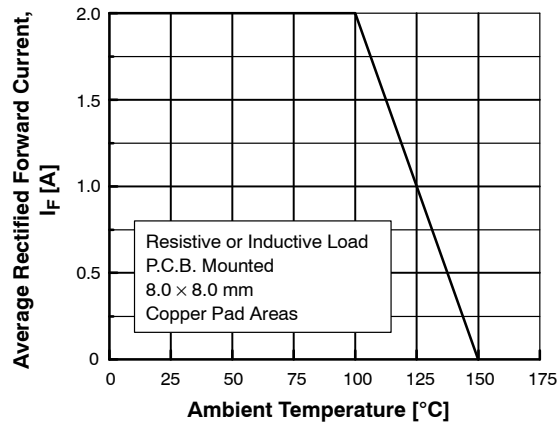


Figure 1. Forward Current Derating Curve

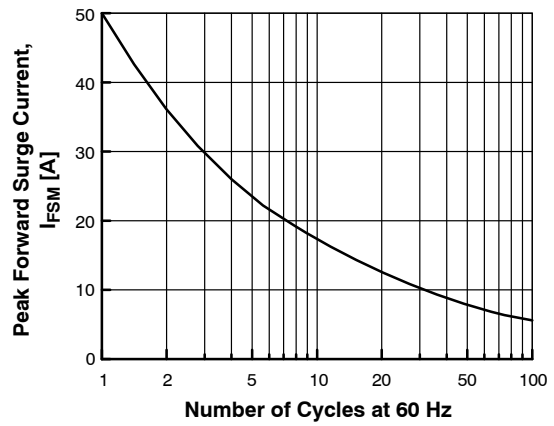


Figure 2. Non-Repetitive Surge Current

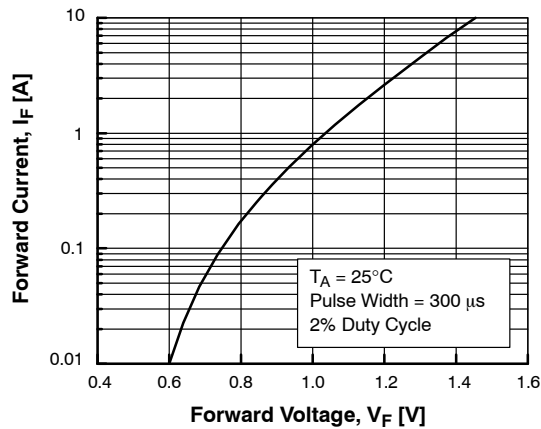


Figure 3. Forward Voltage Characteristics

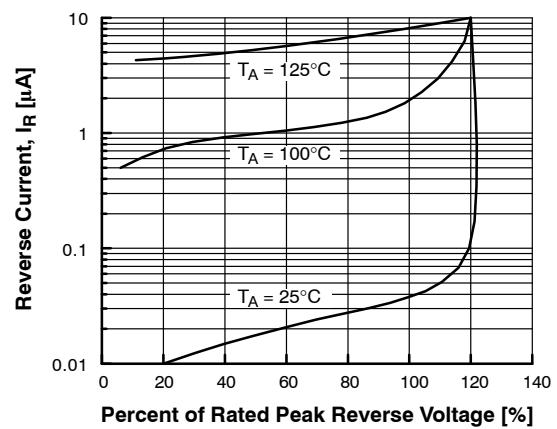


Figure 4. Reverse Current vs. Reverse Voltage

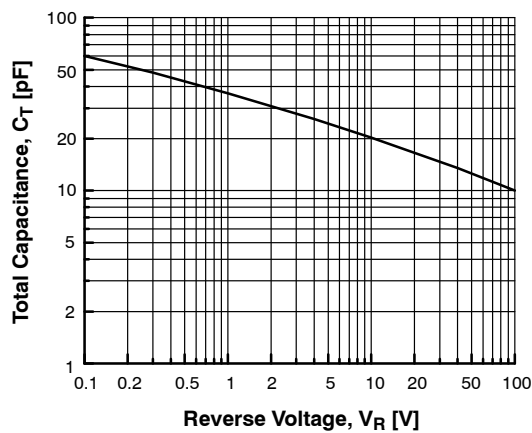
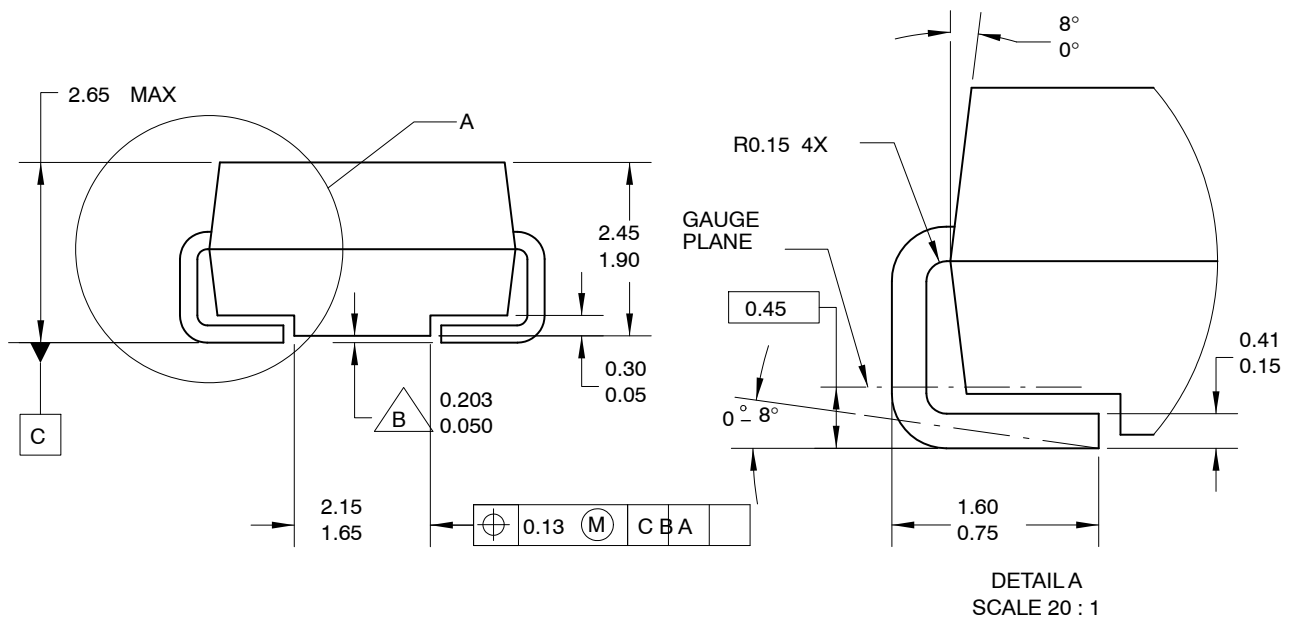
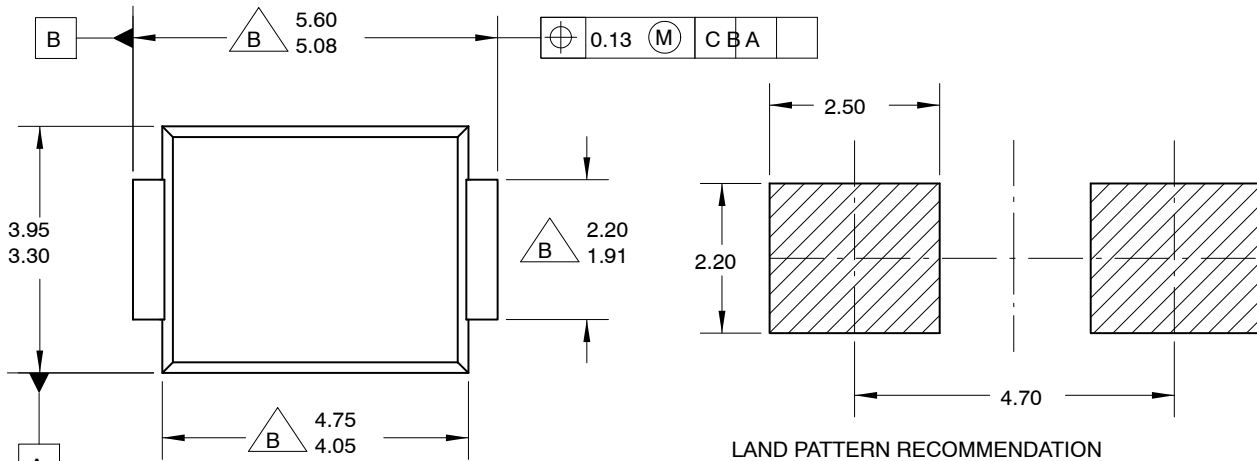


Figure 5. Total Capacitance

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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.

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DESCRIPTION:	SMB	PAGE 1 OF 1

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