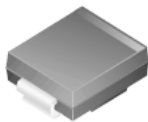


S3N

3A, 1200V Surface Mount Rectifier

Features

- Low Profile Package
- Glass Passivated Junction.
- High Breakdown Voltage Rating
- UL Flammability Classification 94V-0



SMC/DO-214AB
COLOR BAND DENOTES CATHODE



ELECTRICAL SYMBOL
DEVICE MARKING CODE : S3N

Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	1200	V
I _{F(AV)}	Average Rectified Forward Current, @ T _A =100°C	3.0	A
I _{FSM}	Non-Repetitive Peak Forward Surge Current 8.3msec Single Half Sine Wave	100	A
T _{stg}	Storage Temperature range	-55 to +150	°C
T _J	Operating Junction Temperature Range	-55 to +150	°C

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics T_a = 25°C unless otherwise noted

Symbol	Parameter	Typical	Units
R _{θJL}	Thermal Resistance, Junction to Lead	13	°C/W
R _{θJA}	Thermal Resistance, Junction to Ambient	47	°C/W

* Device mounted on FR-4 PCB with 0.4" x 0.4" (10mm x 10mm) Cu pad

Electrical Characteristics T_a = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V _F	Forward Voltage	I _F = 3.0A			1.2	V
T _{rr}	Reverse Recovery Time	I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A			2.5	μs
I _R	Reverse Current	V _r = 1200V T _A =25°C T _A =125°C			5.0 250	μA μA
C _T	Typical Junction Capacitance	V _r = 4.0V, f = 1.0MHz			60	pF

Typical Characteristics

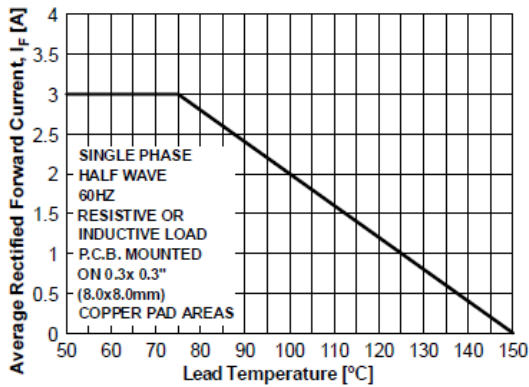


Figure 1. Forward Current Deration Curve

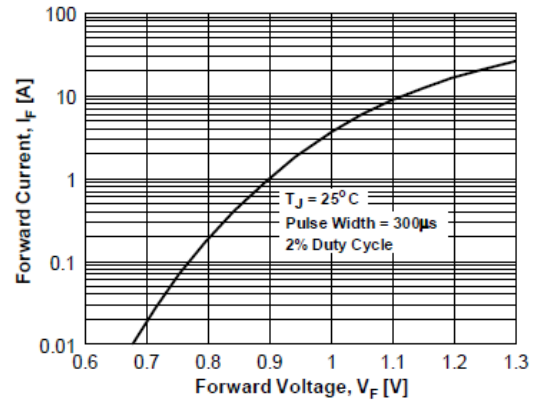


Figure 2. Forward Voltage Characteristics

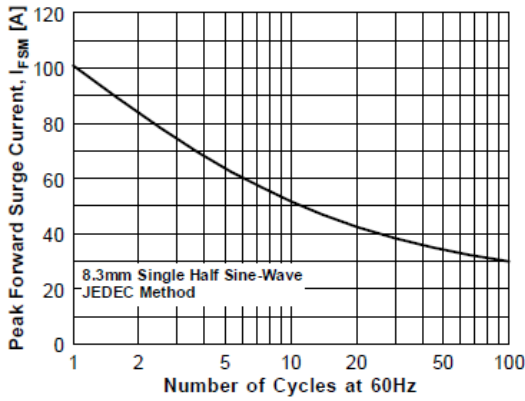


Figure 3. Non-Repetitive Surge Current

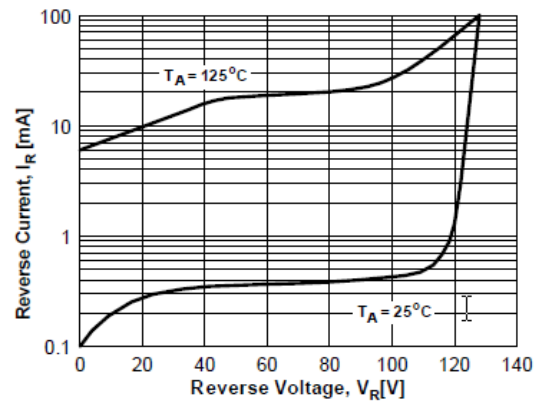


Figure 4. Reverse Current vs Reverse Voltage

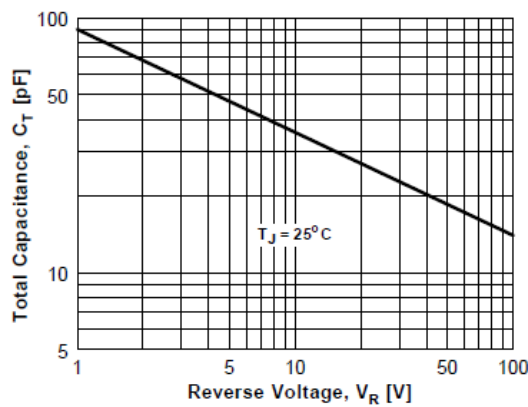
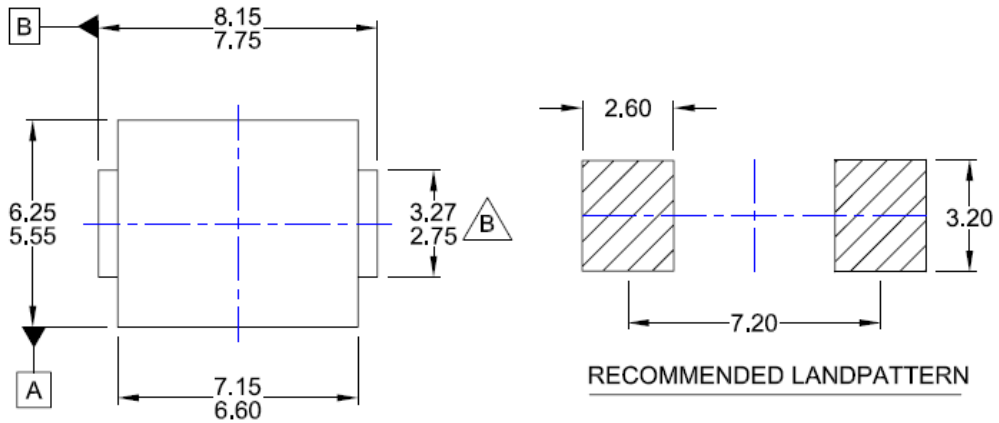


Figure 5. Total Capacitance

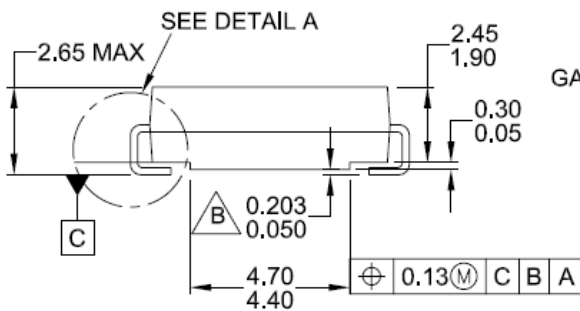
Package Dimensions

SMC/DO-214AB

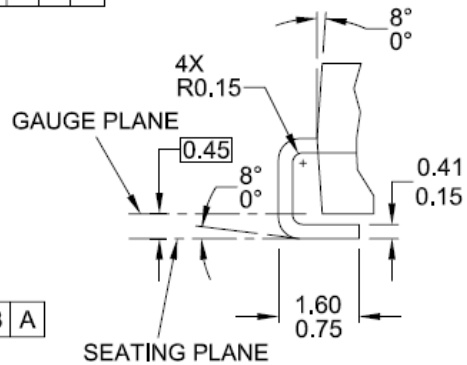


TOP VIEW

⊕ 0.13(M) C B A



SIDE VIEW



DETAIL A

SCALE: 2:1

NOTES:







- A. EXCEPT WHERE NOTED CONFORMS TO JEDEC DO-214, VARIATION AB.
- B. DOES NOT COMPLY TO JEDEC STD. VALUE.
- C. ALL DIMENSIONS ARE IN MILLIMETERS.
- D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR PROTRUSIONS.
- E. DIMENSIONS AND TOLERANCING AS PER ASME Y14.5M-1994
- F. LAND PATTERN STANDARD: DIOM7957X241M
- G. DRAWING FILE NAME: DO214ABREV1

Dimensions in Millimeters



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- | | | | |
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No Identification Needed	Full Production	Datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice to improve the design.
Obsolete	Not In Production	Datasheet contains specifications on a product that is discontinued by Fairchild Semiconductor. The datasheet is for reference information only.

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