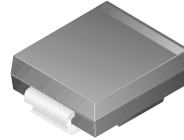




S3A - S3M

Features

- Low profile package.
- Glass passivated junction.



SMC/DO-214AB
COLOR BAND DENOTES CATHODE

General Purpose Rectifiers

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

Symbol	Parameter	Value						Units	
		3A	3B	3D	3G	3J	3K		3M
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
I _{F(AV)}	Average Rectified Forward Current, @ T _A = 100°C	3.0						A	
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	100						A	
T _{stg}	Storage Temperature Range	-55 to +150						°C	
T _J	Operating Junction Temperature	-55 to +150						°C	

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P _D	Power Dissipation	2.6	W
R _{θJA}	Thermal Resistance, Junction to Ambient*	47	°C/W

*Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter	Device						Units
		3A	3B	3D	3G	3J	3K	
V _F	Forward Voltage @ 3.0 A	1.2						V
t _{rr}	Reverse Recovery Time I _F = 0.5 A, I _R = 1.0 A, I _{rr} = 0.25 A	2.5						μs
I _R	Reverse Current @ rated V _R	5.0						μA
		250						μA
C _T	Total Capacitance V _R = 4.0 V, f = 1.0 MHz	60						pF

Typical Characteristics

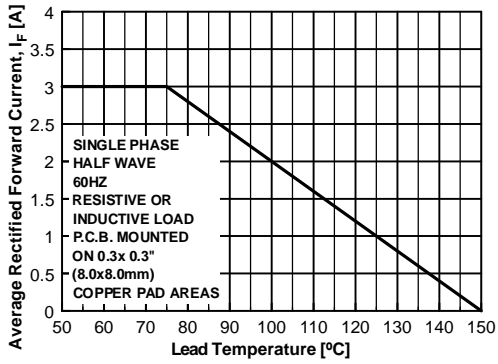


Figure 1. Forward Current Derating Curve

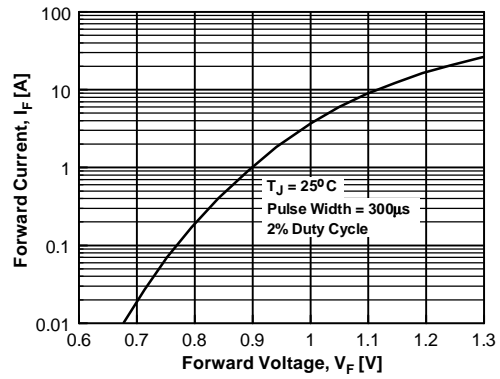


Figure 2. Forward Voltage Characteristics

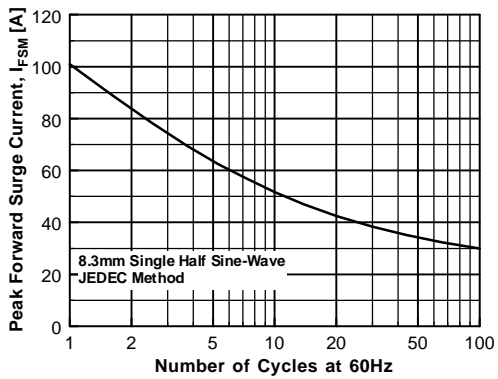


Figure 3. Non-Repetitive Surge Current

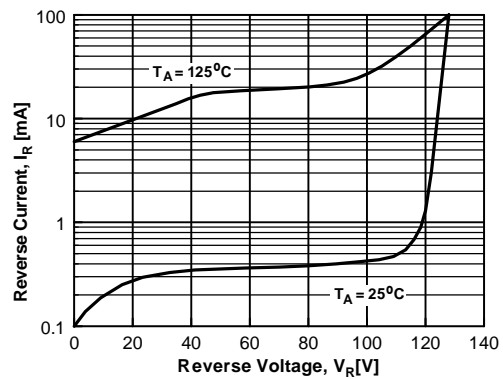


Figure 4. Reverse Current vs Reverse Voltage

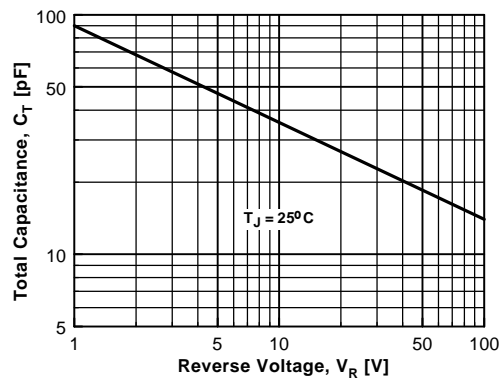


Figure 5. Total Capacitance

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