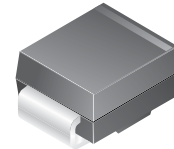


S2A - S2M

General Purpose Rectifiers (Glass Passivated)

Features

- Easy pick and place.
- Low forward Voltage Drop.
- High Current Capability.
- High Surge Current Capability.



SMB/DO-214AA

COLOR BAND DENOTES CATHODE

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value							Units
		2A	2B	2D	2G	2J	2K	2M	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_A = 100^\circ\text{C}$	2.0							A
I_{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	50							A
T_{STG}	Storage Temperature Range	-65 to +150							$^\circ\text{C}$
T_J	Operating Junction Temperature	-65 to +150							$^\circ\text{C}$

* 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	2.35	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient*	53	$^\circ\text{C}/\text{W}$

* Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value							Units
		2A	2B	2D	2G	2J	2K	2M	
V_F	Forward Voltage @ 2.0A	1.15							V
t_{rr}	Reverse Recovery Time $I_F = 0.5\text{A}, I_R = 1.0\text{A}, I_{rr} = 0.25\text{A}$	2.0							μs
I_R	Reverse Current @ rated V_R $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	1.0 125							μA μA
C_T	Total Capacitance $V_R = 4.0\text{V}, f = 1.0\text{MHz}$	30							pF

Typical Performance Characteristics

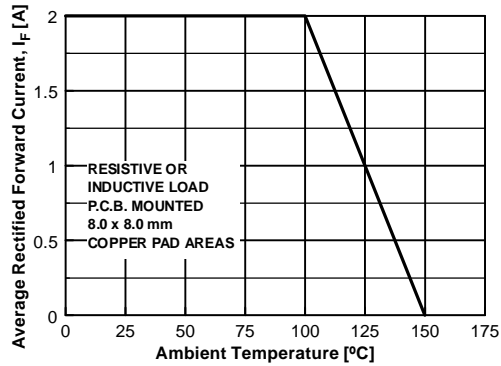


Figure 1. Forward Current Derating Curve

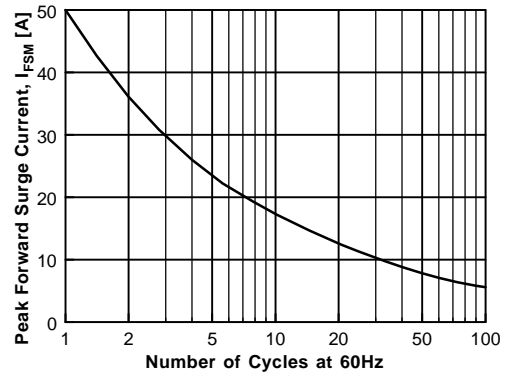


Figure 2. Non-Repetitive Surge Current

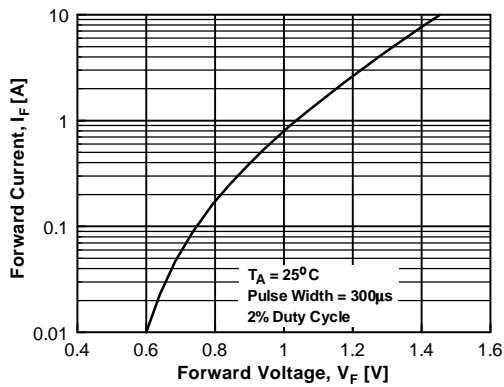


Figure 3. Forward Voltage Characteristics

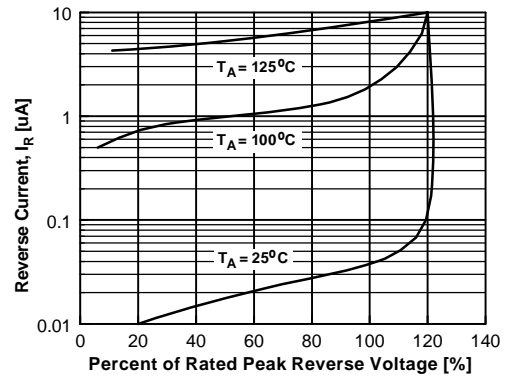


Figure 4. Reverse Current vs Reverse Voltage

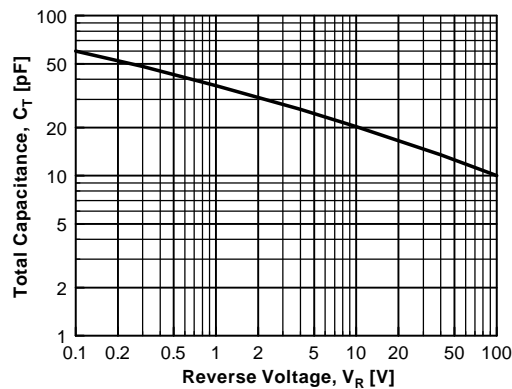


Figure 5. Total Capacitance



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