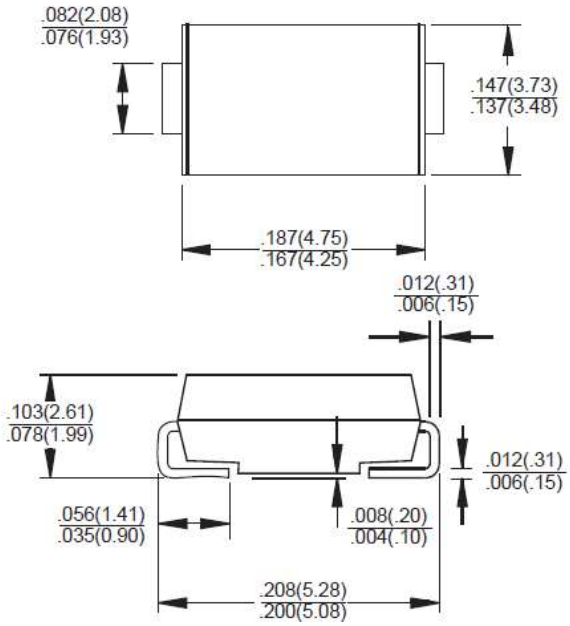
Surface Mount Fast Recovery Rectifiers
Reverse Voltage 50 to 1000 Volts Forward Current 2.0 Amperes

Features
- For surface mounted application
- Glass passivated junction chip
- Fast reverse recovery time
- Fast switching for high efficiency
- High current capability
- High temperature soldering: 260°C/10 seconds at terminals

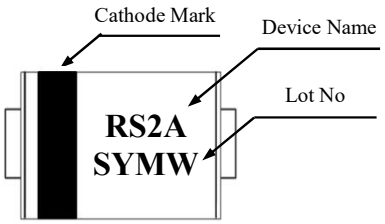
Mechanical Data
- Case : Molded plastic
- Terminals : Solderable plated
- Polarity : Indicated by cathode band
- Weight : 0.093 gram

SMB(DO-214AA)



Dimensions in inches and (millimeters)

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
Single phase half wave 60 HZ, resistive or inductive load
For capacitive load, derate current by 20%

Parameter	Symbol	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	Unit	Remark
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current	$I_F(AV)$	2.0							A	
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A	
Maximum Instantaneous Forward Voltage @ 2.0A	V_F	1.3							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5.0							uA	Ta=25°C
		200							uA	Ta=125℃
Maximum Reverse Recovery Time	trr	150				250	500		ns	Note 1
Typical Junction Capacitance	C_J	50							pF	Note 2
Typical Thermal Resistance	Rth(j-a)	55							℃/W	Note 3
	Rth(j-l)	18							℃/W	
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C	

Note 1. Reverse Recovery Time Test Conditions : I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
Note 2. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.
Note 3. Measured on P.C.Board with 0.4" × 0.4" (10mm×10mm) Copper Pad Areas.

Ratings and Characteristics Curves (Ta=25℃ unless otherwise noted)

Fig.1 Forward Current Derating Curve

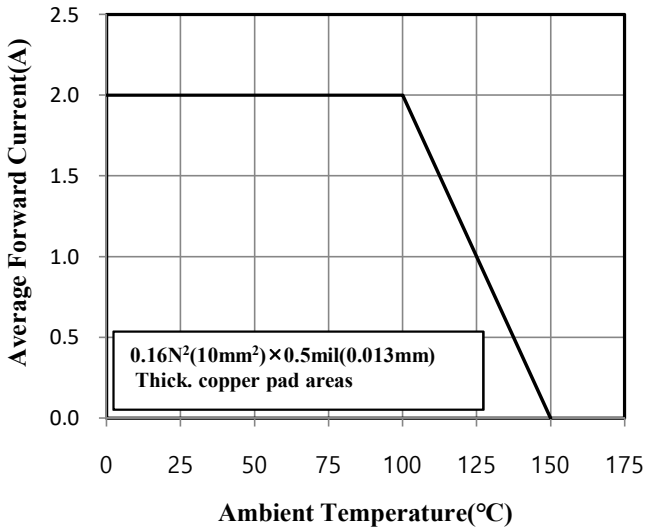


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

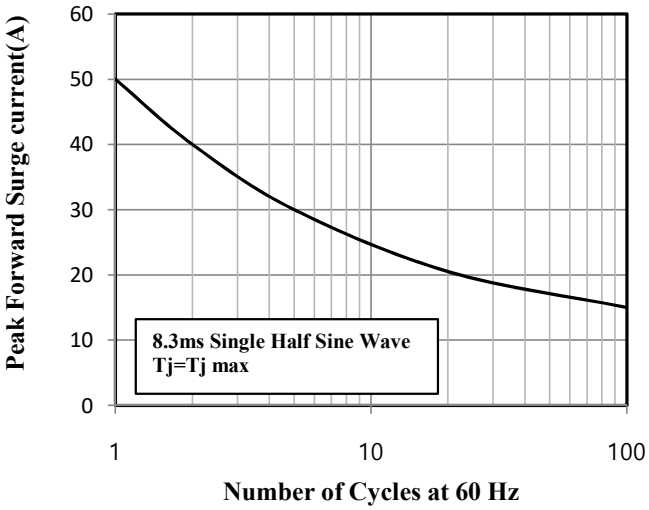


Fig.3 Typical Instantaneous Forward Characteristics

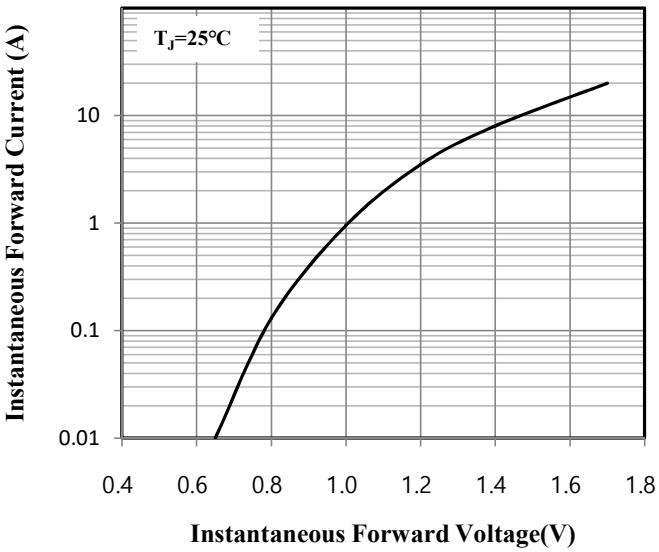


Fig.4 Typical Junction Capacitance

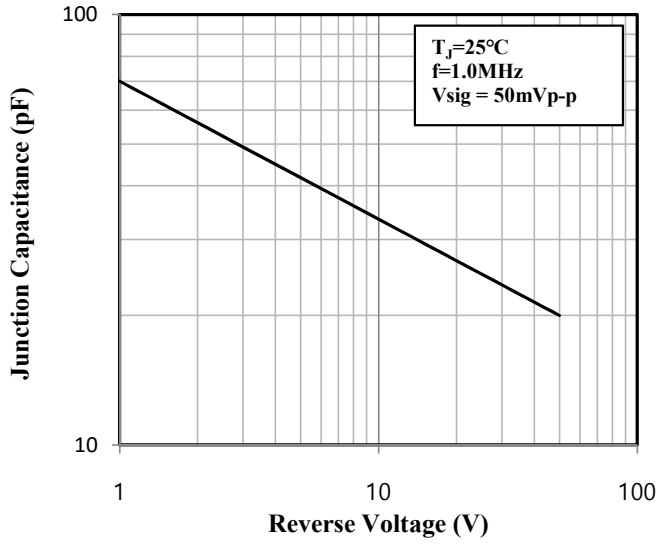


Fig.5 Typical Reverse Charateristics

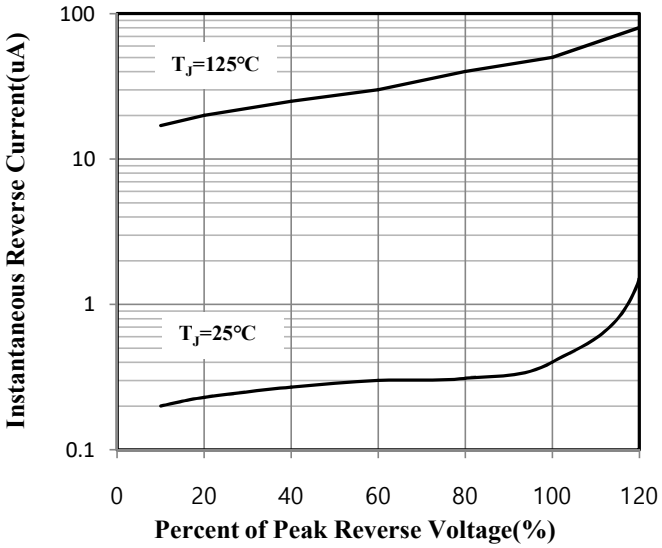


Fig. 6 Reverse Recovery Time Charateristic and Test Circuit Diagram