



S3AB THRU S3MB

Surface Mount Standard Rectifiers

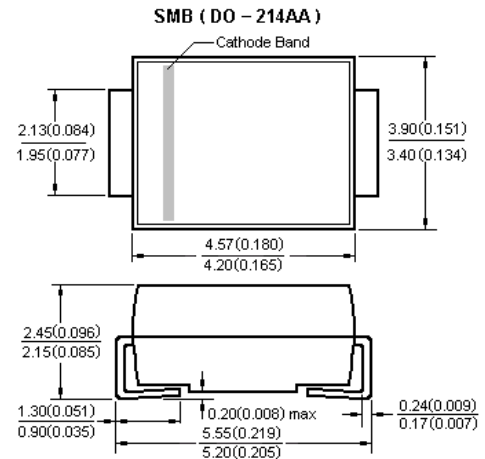
Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junctions
- Fast switching for high efficiency
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC



Mechanical Date

- **Case:** JEDEC DO-214AA molded plastic body over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end



Dimensions in millimeters and (inches)

Maximum Ratings and Electrical Characteristics Rating 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%

Type Number	SYMBOL	S3AB	S3BB	S3DB	S3GB	S3JB	S3KB	S3MB	Unit
Maximum Recurrent 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
Average Rectified Output Current @ $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Forward Voltage @ $I_F=3.0\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	5.0							μA
At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		100							
I^2t Rating for fusing ($t < 8.3\text{ms}$)	I^2t	26.56							A^2s
Typical Junction Capacitance (Note 1)	C_J	53							pF
Typical Thermal Resistance Junction to Ambient (Note 2)	$R_{\theta JA}$	47							$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	18							
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length .



S3AB THRU S3MB

Surface Mount Standard Rectifiers

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

