



TAYCHIPST

SURFACE MOUNT GLASS PASSIVATED RECTIFIER

S3A THRU S3M

50V-1000V 3.0A

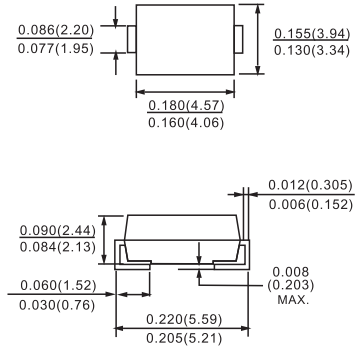
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- glass passivated junction
- High temperature soldering guaranteed: 260°C /10 seconds at terminals

Mechanical Data

- Case: Molded Plastic
- Case Material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Weight: SMB 0.093 grams (approx)
SMC 0.21 grams (approx)

DO-214AA(SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 75^\circ C$	I_O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Forward Voltage @ $I_F = 3.0A$	V_{FM}	1.20							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_{RM}	5.0							μA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		250							
Reverse Recovery Time (Note 1)	t_{rr}	2.5							μS
Typical Junction Capacitance (Note 2)	C_j	60							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	13							K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							$^\circ C$

Note: 1. Measured with $I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,$
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



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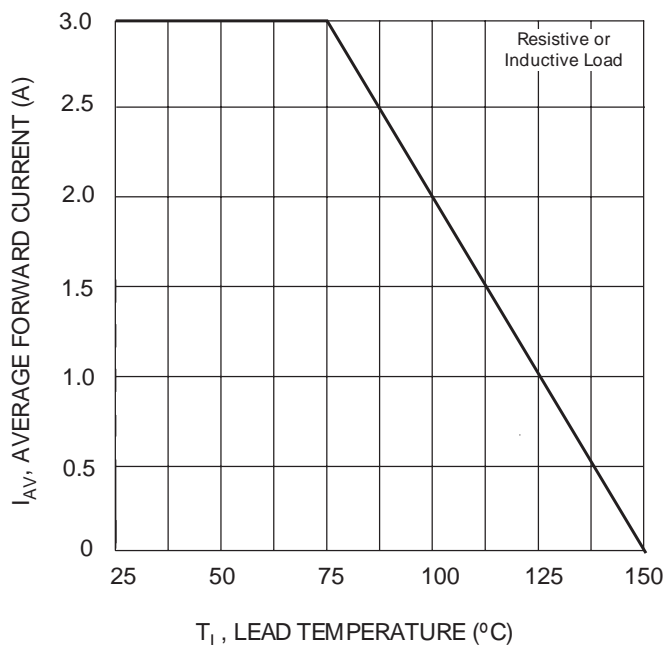


Fig. 1 Forward Current Derating Curve

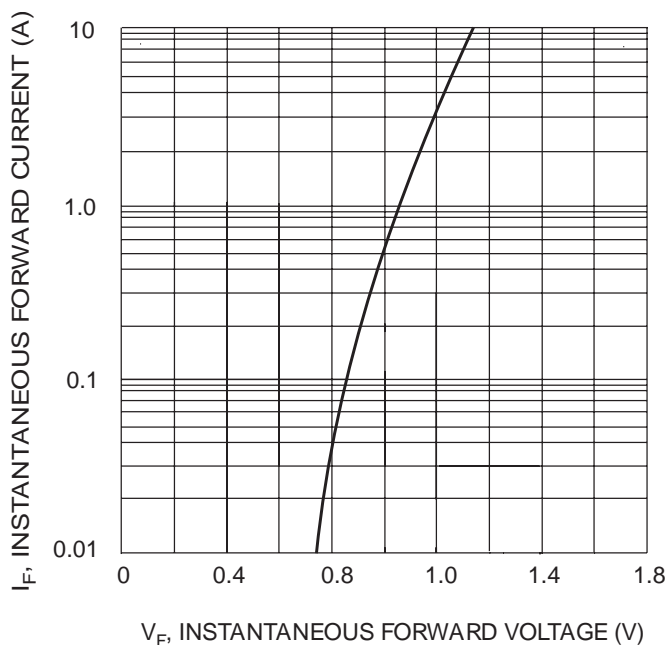


Fig. 2 Typical Forward Characteristics

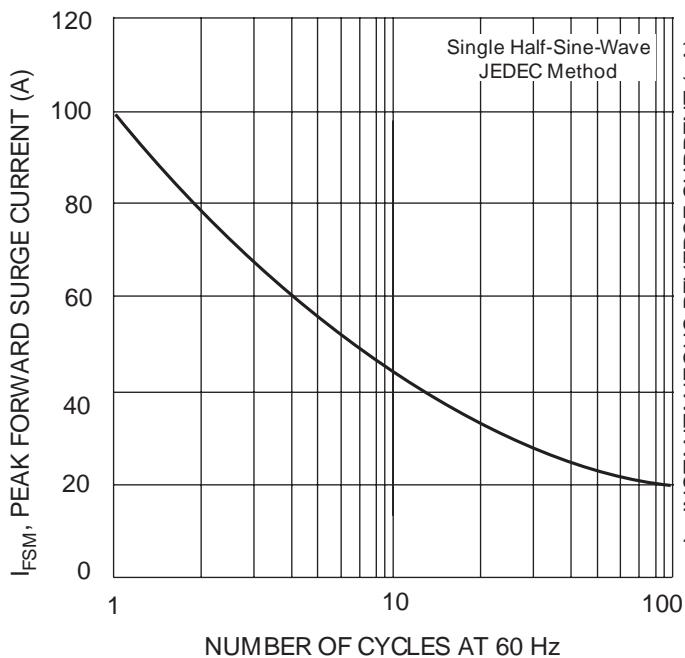


Fig. 3 Forward Surge Current Derating Curve

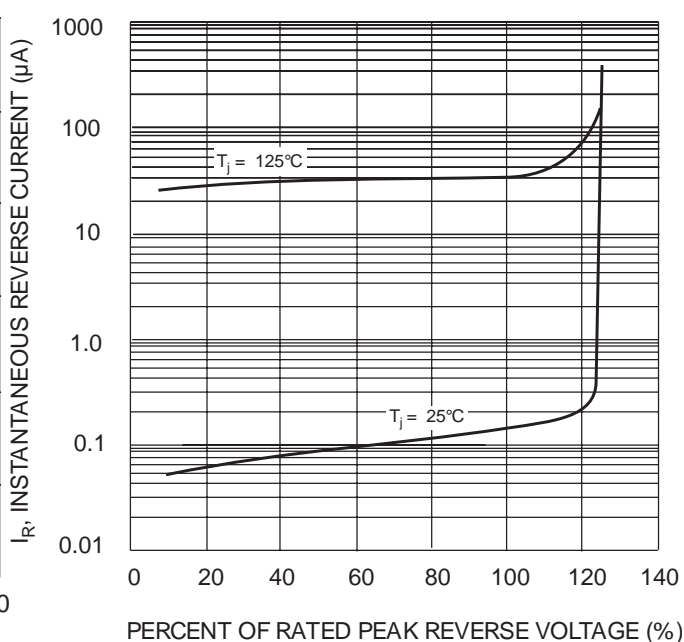


Fig. 4 Typical Reverse Characteristics