



S3ACU THRU S3MCU

3.0 AMP Surface Mount Passivated Rectifiers

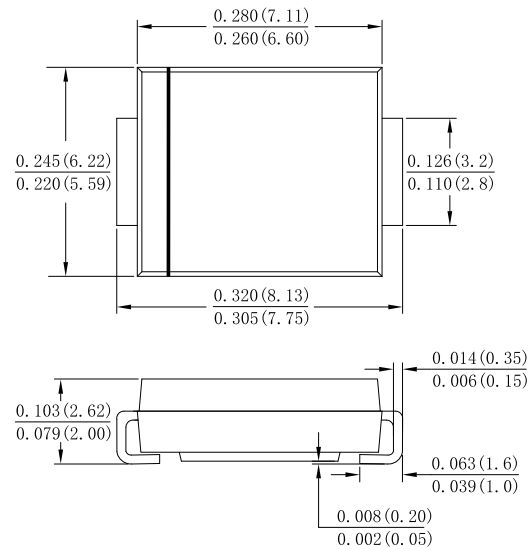
Features

- Glass Passivated Die Construction
- Low forward voltage drop
- High current capability
- High reliability
- Metal silicon junction,majority carrier conduction
- Plastic Case Material has UL Flammability
- Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMC
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: as marked on case
- Mounting Position: Any
- Making: Type Number

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbols	S3ACU	S3BCU	S3DCU	S3GCU	S3JCU	S3KCU	S3MCU	Units
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 _C =110 °C	I _{F(AV)}	3.0							A
Non-Repetitive Peak Forward Surge @T _j =25 °C Current 8.3ms Single half sine-wave@T _j =125 °C Superimposed On Rated Load (JEDEC Method)	I _{FSM}	130 104							A
Non-Repetitive Peak Forward Surge @T _j =25 °C Current 1.0ms Single half sine-wave @T _j =125°C Superimposed On Rated Load (JEDEC Method)	I _{FSM}	260 208							A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I _{FSM}	97.5							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	70.135							A ² S
Forward Voltage @IF=3.0A	V _F	1.0							V
Peak Reverse Current @T _A =25 °C	I _R	5.0							uA
At Rated DC Blocking Voltage @T _A =125°C		100							
Typical Junction Capacitance (Note 1)	C _J	25							pF
Typical Thermal Resistance	R _{θJC}	15							°C/W
	R _{θJA}	80							
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C

Note:

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



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Fig. 1 Forward Current Derating Curve

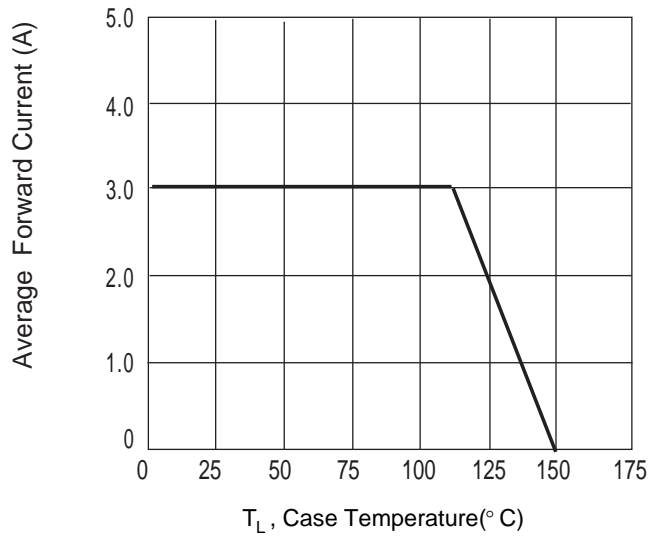


Fig. 2 Typ. Forward Characteristics

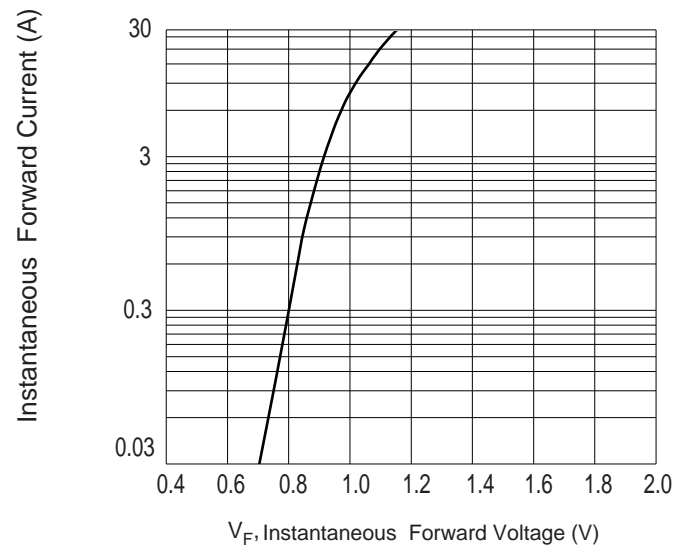


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

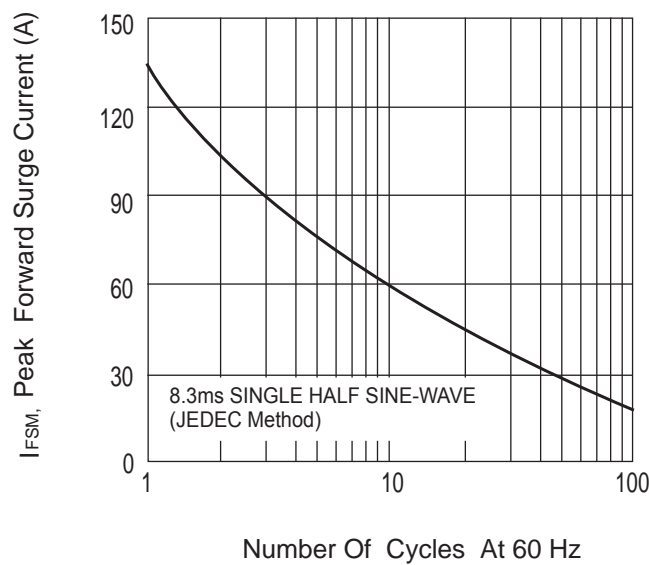


Fig.4 Typical Reverse Characteristics

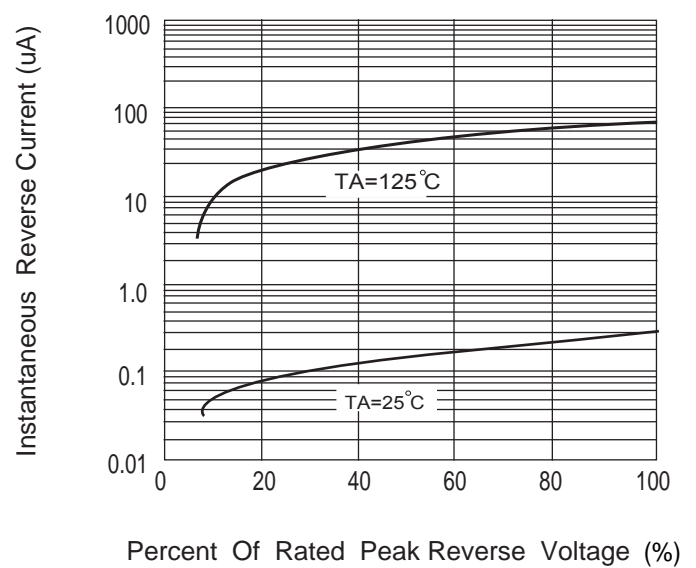
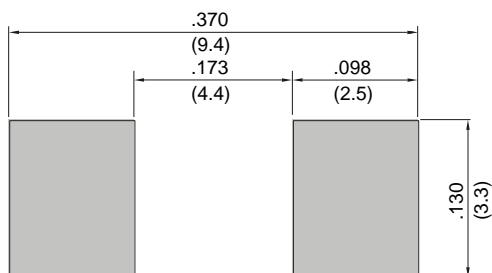


Fig.5 Mounting PAD Layout





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