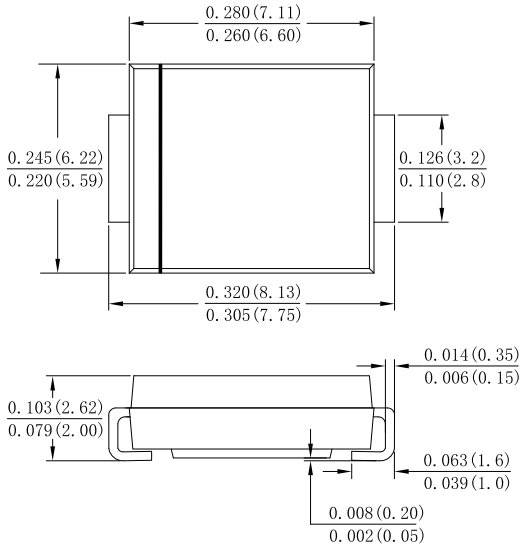
UF5AC THRU UF5MC

5.0 AMP Surface Mount Glass Ultra Fast Rectifiers

Features

- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V- 0

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic SMC
- Terminals: Plated leads solderable per MIL-STD-750,Method 2026 guaranteed
- Polarity: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number

Maximum Ratings and Electrical Characteristics

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

Type Number	SYMBOL	UF5AC	UF5BC	UF5DC	UF5GC	UF5JC	UF5KC	UF5MC	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℃	$I_{F(AV)}$	5.0							A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 8.3ms Single half sine-wave @$T_{j=125}$ ℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	150 120							A
Non-Repetitive Peak Forward Surge @$T_{j=25}$ ℃ Current 1.0ms Single half sine-wave @$T_{j=125}$℃ Superimposed On Rated Load (JEDEC Method)	I_{FSM}	320 240							A
10000 times of the wave surge current (time width 1ms, time interval 3s)	I_{FSM}	112.5							A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	93.375							A^2s
Forward Voltage @IF=5.0A	V_{FM}	1.0			1.3	1.7			V
Peak Reverse Current @T_A =25 ℃ At Rated DC Blocking Voltage @T_A =125 ℃	I_R	3.0 100							uA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			ns
Typical Junction Capacitance (Note 2)	C_J	80				50			pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	60 25							℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to+175							℃

Note:

1.Reverse Recovery Test Conditions:IF=0.5A,IR=1.0A,IRR=0.25A.

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

Fig. 1 Forward Current Derating Curve

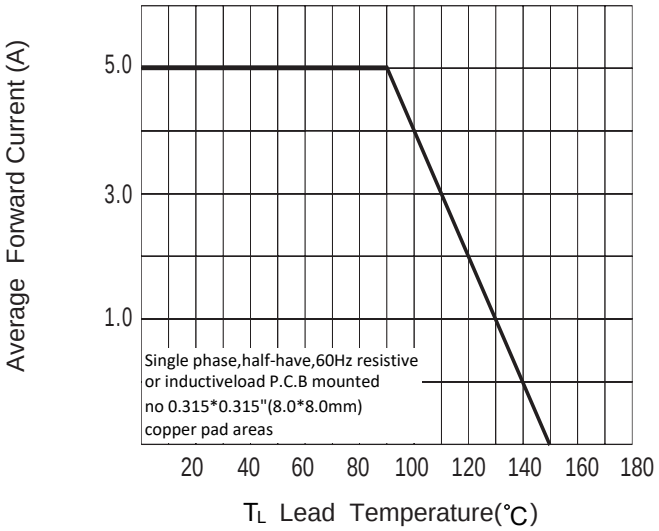


Fig. 2 Typ. Forward Characteristics

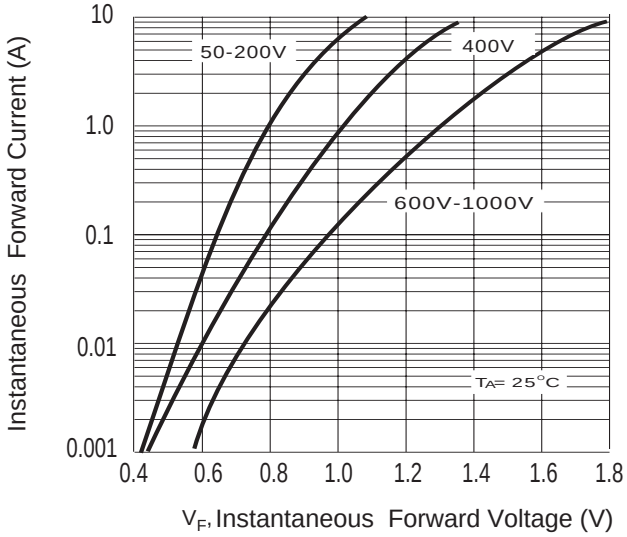


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

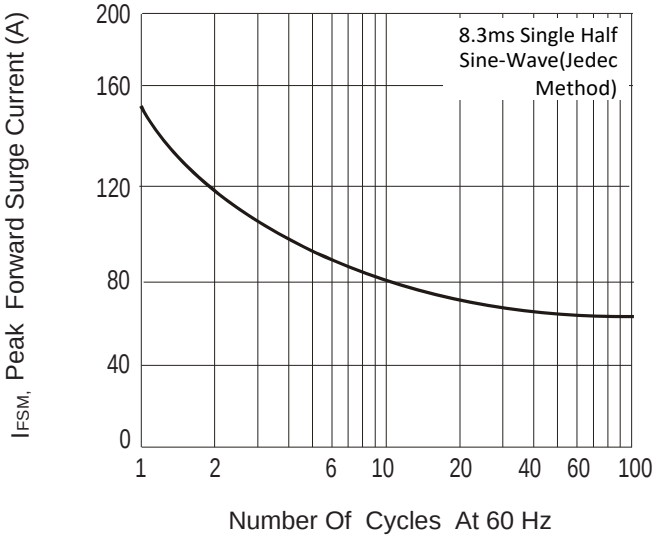


Fig.4 Typical Junction Capacitance

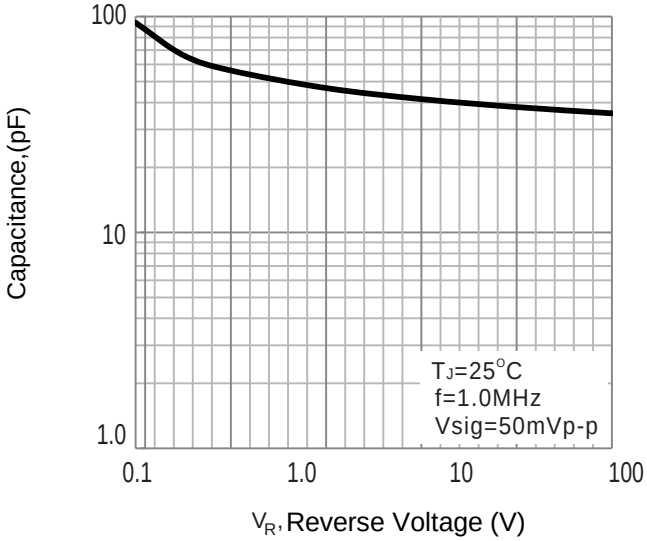


Fig.5 Typical Reverse Chracteristics

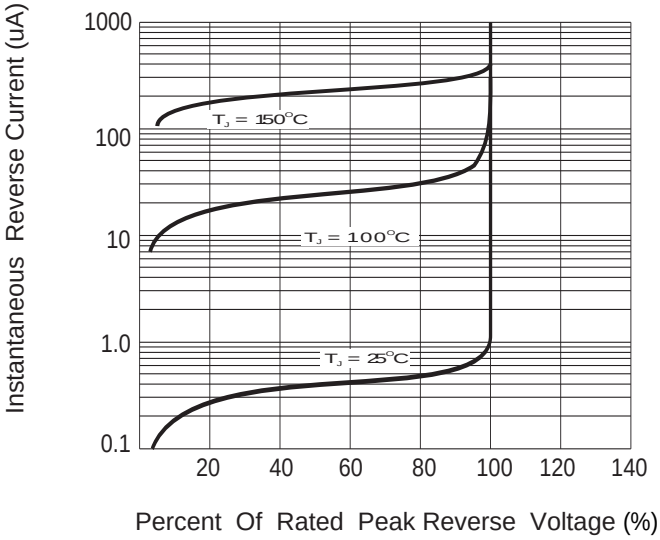
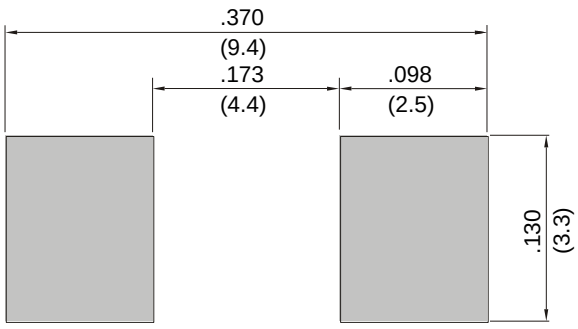


Fig.6 Mounting PAD Layout



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

  XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own ris k andagree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.