ER5AC THRU ER5KC

5.0 AMP Surface Mount Superfast Rectifiers

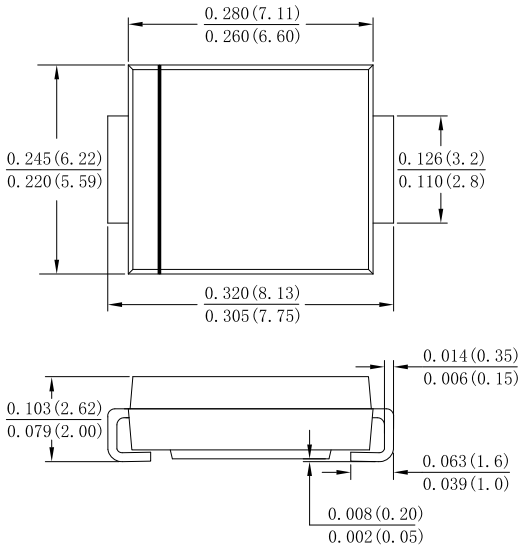
Features

- Glass passivated junction chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Guard Ring Die Construction
- 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: Color band dentes cathode end
- Mounting Position: Any
- Making: Type Number

Case: SMC(DO-214AB)



Dimensions in inches and (millimeters)

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	Symbols	ER5AC	ER5BC	ER5DC	R5GC	ER5JC	ER5KC	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Average Rectified Output Current @T_L =75 ℃	$I_{F(AV)}$	5.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	150 120						A
Non-Repetitive Peak Forward Surge Current 1.0ms Single half sine-wave Superimposed On Rated Load (JEDEC Method)	I_{FSM}	300 240						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=5A	V_F	0.95			1.3	1.7	1.9	V
Peak Reverse Current @T_A=25℃	I_R	3.0						uA
At Rated DC Blocking Volta @T_A=125℃		100						
Maximum Reverse Recovery Time (Note 1)	Trr	35						ns
Typical Junction Capacitance (Note 2)	C_J	45			30			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	17						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150						℃

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.

3.Thermal Resistance from Junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas.

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

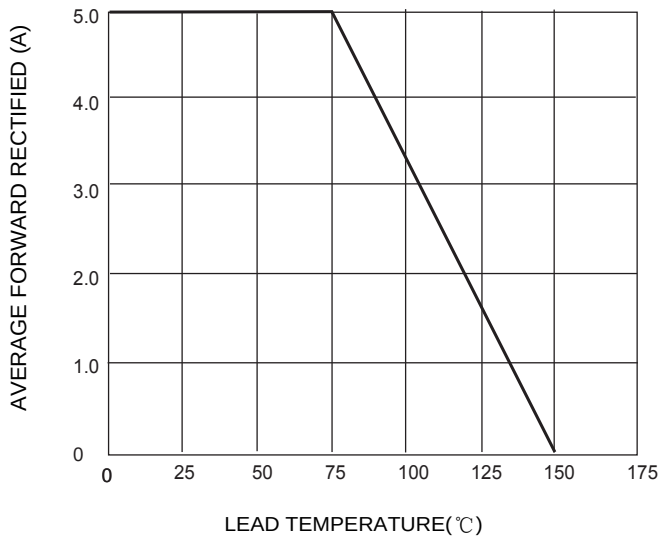


FIG.2 TYPICAL FORWARD CHARACTERISTICS

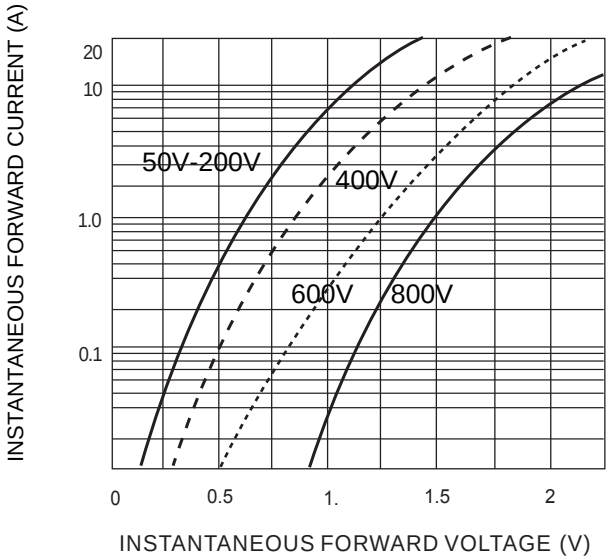


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

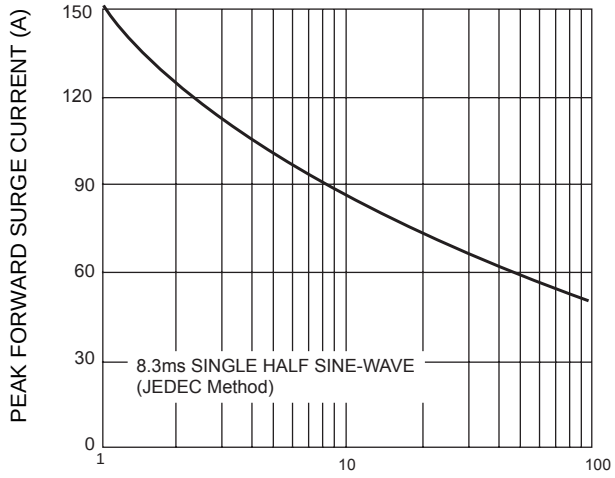


FIG.4 TYPICAL REVERSE CHARACTERISTICS

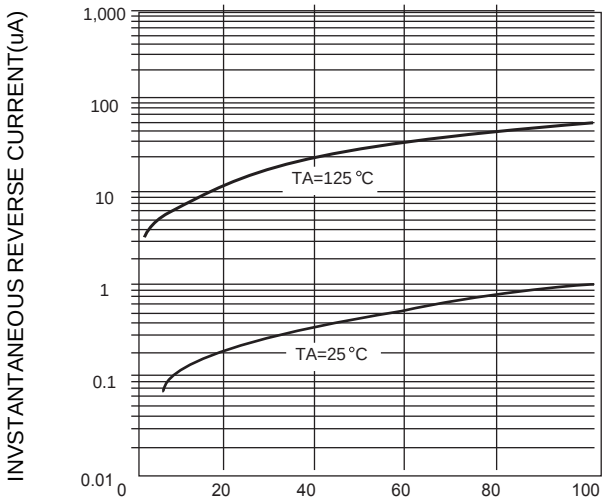
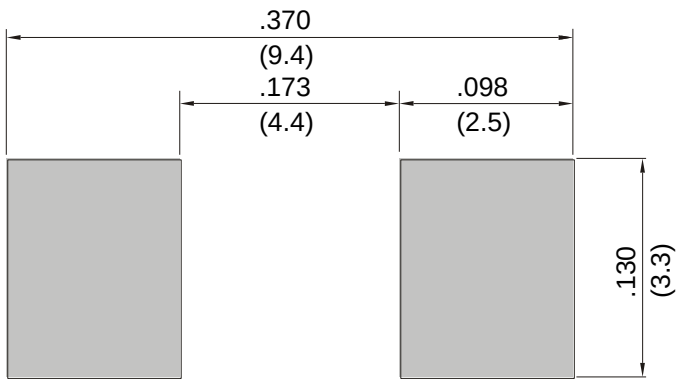


FIG.5 MOUNTING PAD LAYOUT



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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Rectifiers ***category:***

Click to view products by DIYI ***manufacturer:***

Other Similar products are found below :

70HFR40 FR105 R0 RL252-TP 1N5397 JANTX1N5634A 1N4002G 1N4005-TR JANS1N6640US 481235F RRE02VS6SGTR 067907F MS306 US2JFL-TP A1N5404G-G CRS12(T5L,TEMQ) ACGRB207-HF CLH07(TE16L,Q) CLH03(TE16L,Q) ACGRC307-HF ACEFC304-HF DZ-1380 NTE6356 NTE6359 JAN1N5555 85HFR60 40HFR60 70HF120 85HFR80 D126A45C SCF7500 SCHJ22.5K SM100 SCPA2 SDHD5K ACGRA4001-HF D1821SH45T PR D1251S45T NTE6358 NTE5850 NTE5819 NTE5837 NTE5892 NTE5900 NTE5911 NTE5915 NTE5921 NTE6104 NTE6105 NTE6154 NTE6158