

### 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

Classication 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	S8AC	S8BC	S8DC	S8GC	S8JC	S8KC	S8MC	Units
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Average Rectified Output Current @T <sub>c</sub> =110 °C	IF(AV)	8.0							А
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)	Ifsm	200 160							A
Non-Repetitive Peak Forward Surge @ <sup>T</sup> j=25 ℃ Current 1.0ms Single half sine-wave @ <sup>T</sup> j=125℃ Superimposed On Rated Load (JEDEC Method)	Ігям	400 320							А
10000 times of the wave surge current (time width 1ms, time interval 3s)	IFSM	150							A
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	166							A <sup>2</sup> S
Forward Voltage @IF=8.0A	V <sub>F</sub>	1.0							V
Peak Reverse Current @T <sub>A</sub> =25 °C		5.0							uA
At Rated DC Blocking Voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	100							
Typical Junction Capacitance (Note 1)	CJ	65							pF
Typical Thermal Resistance (Note 2)	$R_{ extsf{ heta}JA}$	75							°C/W
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

2. Thermal Resistance Junction to Lead.



#### FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING



#### FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT



FIG.5 MOUNTING PAD LAYOUT



FIG.2 TYPICAL FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE (V)

#### Fig. 4 TYPICAL REVERSE CHRACTERISTICS



PERCENT OF RATED PEAK INVERSE VOLTGE (%)



# **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 Diodes - General Purpose, Power, Switching category:

Click to view products by DIYI manufacturer:

Other Similar products are found below :

MCL4151-TR3 MMBD3004S-13-F RD0306T-H BAV17-TR BAV19-TR 1N3611 NTE156A NTE574 NTE6244 1SS181-TP 1SS400CST2RA SDAA13 SHN2D02FUTW1T1G LS4151GS08 1N4449 1N456A 1N4934-E3/73 1N914B 1N914BTR 1SS226-TP RFUH20TB3S D291S45T BAV300-TR BAW56DWQ-7-F BAW75-TAP MM230L-CAA IDW40E65D1 JAN1N3600 JAN1N4153-1 JAN1N4454-1 JAN1N4454UR-1 LL4151-GS18 053684A SMMSD4148T3G 707803H NSVDAN222T1G CDSZC01100-HF LL4150-M-08 1N4454-TR BAV199E6433HTMA1 BAV70HDW-7 BAS28-7 JANTX1N6640 BAW56HDW-13 BAS28 TR VS-HFA04SD60STR-M3 NSVM1MA152WKT1G 1SS388-TP RGP30D-E3/73 VS-8EWF02S-M3