



### MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

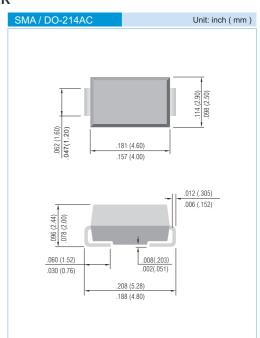
 VOLTAGE
 20 to 60 Volts
 CURRENT
 2.0 Amperes

### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- · Low power loss, high efficiency
- · High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives

#### **MECHANICAL DATA**

- Case: JEDEC DO-214AC molded plastic
- Terminals:Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Color band denotes positive end (cathode)
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.002 ounce, 0.067 gram



### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

| PARAMETER   | SYMBOL                               | SR22                    | SR23 | SR24      | SR25 | SR26 | UNITS  |
|---|--------------------------------------|-------------------------|------|-----------|------|------|--------|
|   |                                      |                         |      |           |      |      |        |
| Maximum Recurrent Peak Reverse Voltage  | VRRM                                 | 20                      | 30   | 40        | 50   | 60   | V      |
| Maximum RMS Voltage   | VRMS                                 | 14                      | 21   | 28        | 35   | 42   | V      |
| Maximum DC Blocking Voltage   | VDC                                  | 20                      | 30   | 40        | 50   | 60   | V      |
| Maximum Average Forward Current at TL=75°C  | l <sub>F(AV)</sub>                   | 2.0                     |      |           |      |      | А      |
| Peak Forward Surge Current :8.3ms single half sine-<br>wave superimposed on rated load(JEDEC method)  | IFSM                                 | 50                      |      |           |      |      | А      |
| Maximum Forward Voltage at 2.0A ( Note 1)   | VF                                   | 0.5                     |      |           | 0.7  |      | V      |
| Maximum DC Reverse Current T <sub>J</sub> =25°C<br>at Rated DC Blocking Voltage T <sub>J</sub> =100°C | IR                                   | 0.2<br>20               |      | 0.1<br>20 |      | mA   |        |
| Typical Thermal Resistance ( Note 2)  | R <sub>eJL</sub><br>R <sub>eJA</sub> | 20<br>75                |      |           |      |      | °C / W |
| Operating Junction and Storage Temperature Range  | ТЈ,Тѕтс                              | -55 to +125 -55 to +150 |      |           | °C   |      |        |
|   |                                      |                         |      |           |      |      |        |

### NOTES:

- 1. Pulse Test with PW =300µsec, 1% Duty Cycle.
- 2. Mounted on P.C. Board with 8mm<sup>2</sup> (.013mm thick) copper pad areas.

STAD-MAR.18.2009 PAGE . 1





### **RATING AND CHARACTERISTIC CURVES**

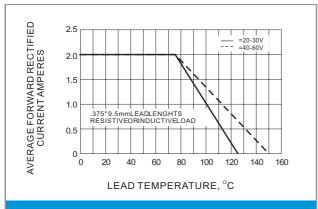


Fig.1- FORWARD CURRENT DERATING CURVE

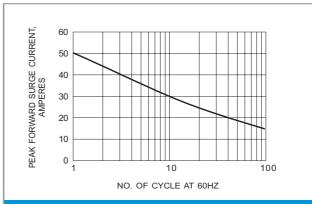


Fig.2- MAXIMUM NON-REPETITIVEPEAKFORWARD SURGE CURRENT

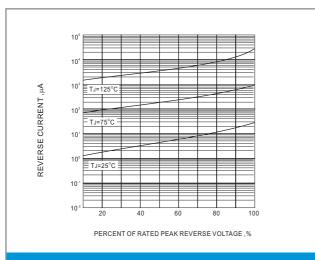


Fig.3-TYPICAL REVERSE CHARACTERISTIC

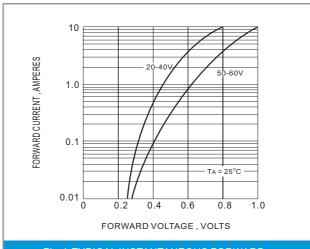
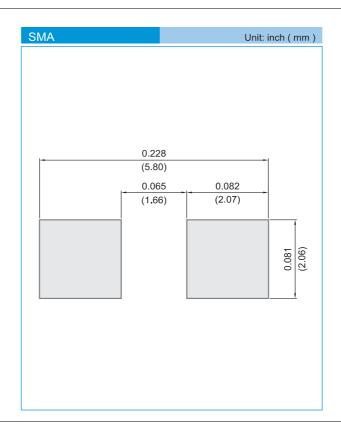


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

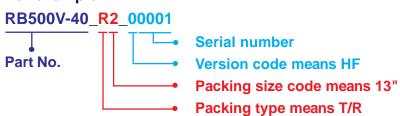
T/R - 7.5K per 13" plastic Reel

T/R - 1.8Kper 7" plastic Reel





## For example:



| Packing Code XX |                      |                   | Version Code XXXXX   |            |                      |                                       |
|-----------------|----------------------|-------------------|----------------------|------------|----------------------|---------------------------------------|
| Packing type    | 1 <sup>st</sup> Code | Packing size code | 2 <sup>nd</sup> Code | HF or RoHS | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| T/B             | Α                    | N/A               | 0                    | HF         | 0                    | serial number                         |
| T/R             | R                    | 7"                | 1                    | RoHS       | 1                    | serial number                         |
| В/Р             | В                    | 13"               | 2                    |            |                      |                                       |
| T/P             | Т                    | 26mm              | Х                    |            |                      |                                       |
| TRR             | S                    | 52mm              | Y                    |            |                      |                                       |
| TRL             | L                    | PBCU              | U                    |            |                      |                                       |
| FORMING         | F                    | PBCD              | D                    |            |                      |                                       |

## Part No\_packing code\_Version

SR22\_R1\_00001

SR22\_R1\_10001

SR22\_R2\_00001

SR22\_R2\_10001





# Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein 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 risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.