

Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25<sup>°</sup>C unless otherwise noted)

| PARAMETER   | SYMBOL           | 150V                  | UNIT        |          |  |
|---|------------------|-----------------------|-------------|----------|--|
| Maximum repetitive peak reverse voltage   |                  | VRRM                  | 150         | V        |  |
| Maximum rms voltage   |                  | VRMS                  | 105         | V        |  |
| Maximum dc blocking voltage   |                  | VR                    | 150         | V        |  |
| Maximum average forward rectified current   |                  | lf(AV)                | 5           | А        |  |
| Peak forward surge current : 8.3ms single half sine-<br>wave superimposed on rated load |                  | IFSM                  | 150         | А        |  |
| Maximum forward voltage at 5A   |                  | VF                    | 0.85        | V        |  |
| Maximum dc reverse current  | TJ =25°C         | 1-                    | 0.5         | μA<br>mA |  |
| at rated dc blocking voltage  | TJ =125°C        | lr                    | 1           |          |  |
| Typical thermal resistance  | SMB(Note 1)      | 6                     | 18          | °C/W     |  |
|   | DO-201AD(Note 2) | $R_{	extsf{	heta}JC}$ | 17          |          |  |
| Operating junction temperature range  |                  | TJ                    | -55 to +175 | °C       |  |
| Storage temperature range   |                  | Тѕтс                  | -55 to +175 | °C       |  |

Note : 1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area

2. The testing condition of the thermal resistance (junction to Case) is based on 10 mm lead length between two 10cm x 10cm × 0.5mm copper pad

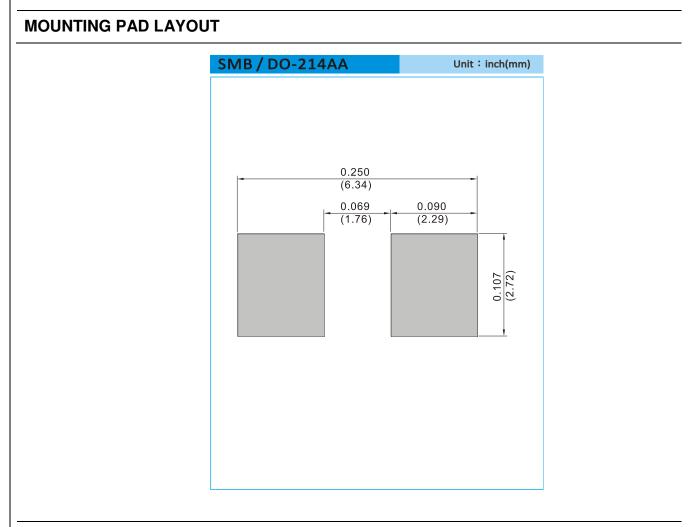




#### MBR5H150SS \ SR5H15 **TYPICAL CHARACTERISTIC CURVES** 6 1000 C<sub>J</sub>, Junction Capacitance (pF) I<sub>F</sub>, Forward Current (A) 5 4 100 3 2 10 1 0 1 10 100 50 75 100 125 150 175 200 0 25 V<sub>R</sub>, Reverse Bias Voltage (V) T<sub>C</sub>, Case Temperature (°C) Fig.1 Forward Current Derating Curve **Fig.2 Typical Junction Capacitance** 10 100 Reverse Current (µA) I<sub>F</sub>, Forward Current (A) 10 T<sub>J</sub> = 125°C T<sub>J</sub> = 150°C 1 T<sub>J</sub> = 150°C 1 T<sub>J</sub> = 125°C T<sub>J</sub> = 75°C T<sub>J</sub> = 75°C 0.1 0.1 0.01 T<sub>J</sub> = 25°C <u>r</u> T<sub>J</sub> = 25°C 0.001 0.01 10 20 30 40 50 60 70 80 90 100 0 0.2 0.4 0.6 0.8 1 Percent of Rated Peak Reverse Voltage (%) V<sub>F</sub>, Forward Voltage (V) **Fig.3 Typical Reverse Characteristics Fig.4 Typical Forward Characteristics**





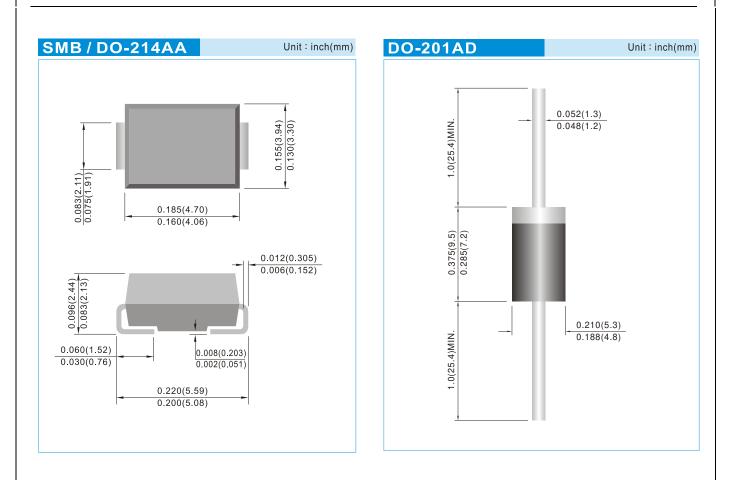


#### **ORDER INFORMATION**

 Packing information T/R – 3K per 13" plastic Reel T/R – 0.8K per 7" plastic Reel











#### Part No\_packing code\_Version

SR5H15\_R1\_00001 SR5H15 R2 00001 MBR5H150SS\_AY\_00001 MBR5H150SS\_AY\_10001 MBR5H150SS B0 00001 MBR5H150SS\_B0\_10001 MBR5H150SS R2 00001 MBR5H150SS R2 10001

### For example :

RB500V-40 R2 00001

Part No.

- Serial number Version code means HF Packing size code means 13"

#### -• Packing type means T/R

| Packing Code XX                         |                         |                                     |                         | Version Code XXXXX |                         |  |
|---|-------------------------|-------------------------------------|-------------------------|--------------------|-------------------------|--|
| Packing type                            | 1 <sup>st</sup><br>Code | Packing size code                   | 2 <sup>nd</sup><br>Code | HF or<br>RoHS      | 1 <sup>st</sup><br>Code | 2 <sup>nd</sup> ~5 <sup>th</sup><br>Code |
| Tape and Ammunition<br>Box (T/B)        | Α                       | N/A                                 | 0                       | HF                 | 0                       | serial<br>number                         |
| Tape and Reel (T/R)                     | R                       | 7"                                  | 1                       | RoHS               | 1                       | serial<br>number                         |
| Bulk Packing (B/P)                      | В                       | 13"                                 | 2                       |                    |                         |  |
| Tube Packing (T/P)                      | т                       | 26mm                                | x                       |                    |                         |  |
| Tape and Reel (Right Oriented)<br>(TRR) | S                       | 52mm                                | Y                       |                    |                         |  |
| Tape and Reel (Left Oriented)<br>(TRL)  | L                       | PANASERT T/B<br>CATHODE UP (PBCU)   | U                       |                    |                         |  |
| FORMING                                 | F                       | PANASERT T/B<br>CATHODE DOWN (PBCD) | D                       |                    |                         |  |





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