



# S5A SERIES

## SURFACE MOUNT RECTIFIER

**VOLTAGE** 50~1000 Volt **CURRENT** 5 Ampere

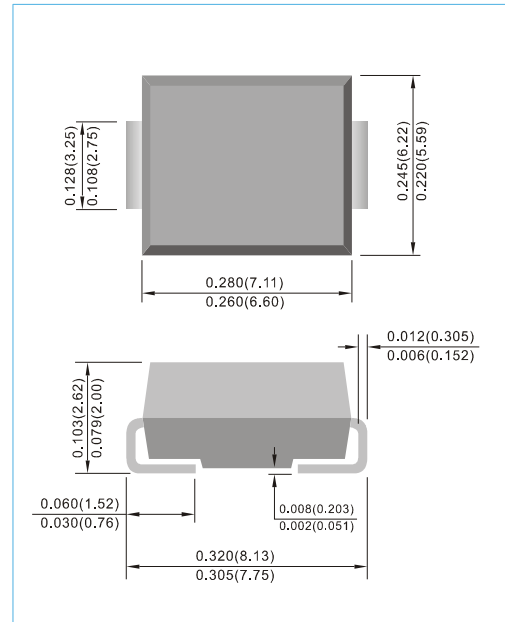
**SMC / DO-214AB** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Easy pick and place
- Glass passivated junction
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: JEDEC SMC / DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.23 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

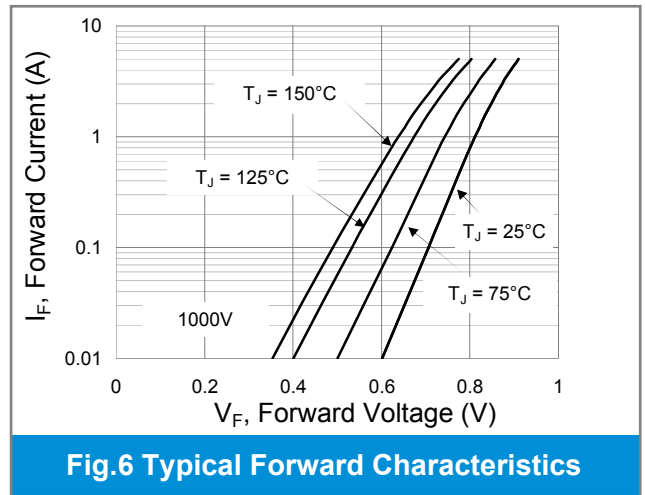
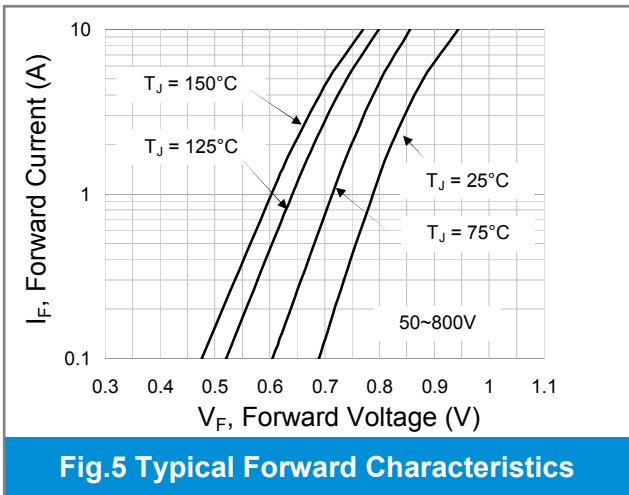
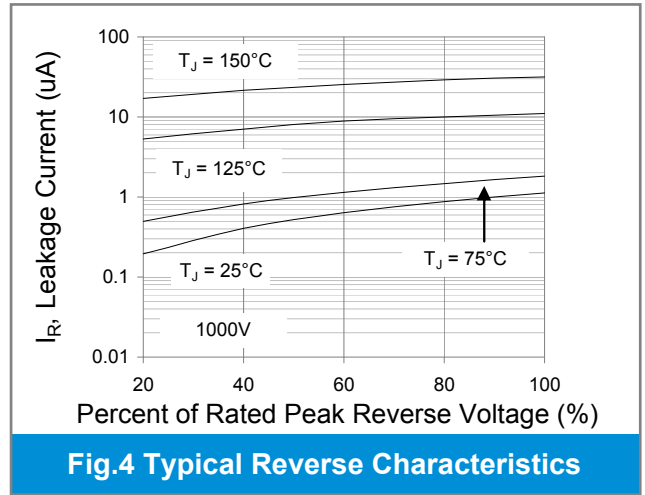
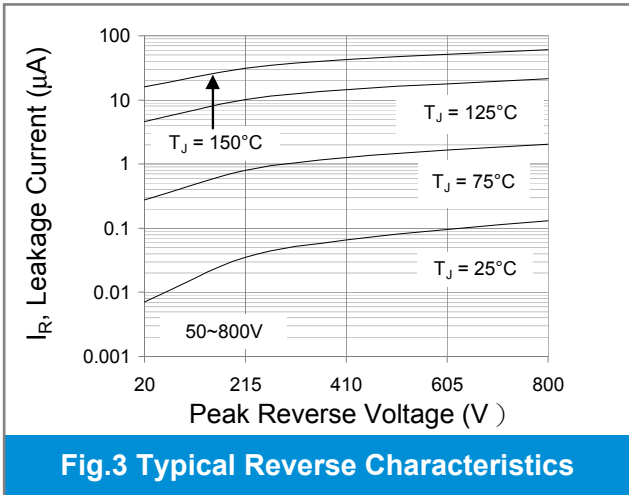
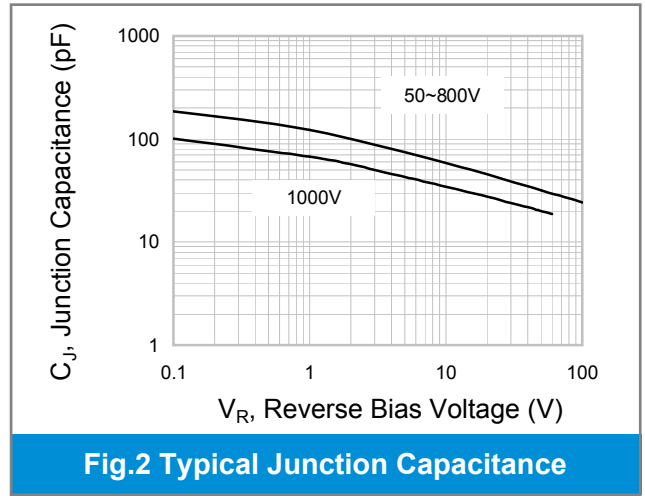
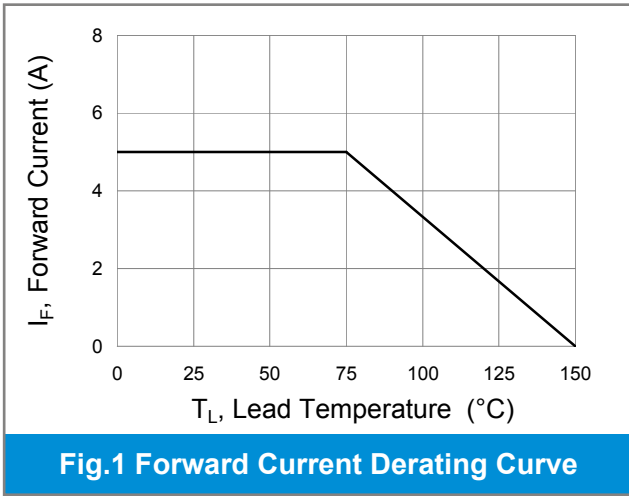
| PARAMETER   | SYMBOL                             | S5A         | S5B | S5D | S5G | S5J | S5K | S5M  | UNITS           |    |
|---|------------------------------------|-------------|-----|-----|-----|-----|-----|------|-----------------|----|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$                          | 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               |    |
| Maximum Average Forward Rectified Current   | $I_{F(AV)}$                        | 5           |     |     |     |     |     |      | A               |    |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$                          | 275         |     |     |     |     |     |      | A               |    |
| Maximum Forward Voltage at 5.0A   | $V_F$                              | 1.1         |     |     |     |     |     |      | V               |    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage                             | $I_R$                              | 10<br>250   |     |     |     |     |     |      | $\mu A$         |    |
| Typical Junction Capacitance (NOTES 1)  | $C_J$                              | 80          |     |     |     |     |     |      | 46              | pF |
| Typical Junction Resistance (NOTES 2)   | $R_{\theta JA}$<br>$R_{\theta JL}$ | 75<br>10    |     |     |     |     |     |      | $^{\circ}C / W$ |    |
| Operating Junction and Storage Temperature Range                                    | $T_J, T_{STG}$                     | -55 to +150 |     |     |     |     |     |      | $^{\circ}C$     |    |

**NOTES :**

- 1.Measured at 1 MHZ and applied Vr=4 volts.
- 2.8mm<sup>2</sup> (0.013mm thick)land areas.



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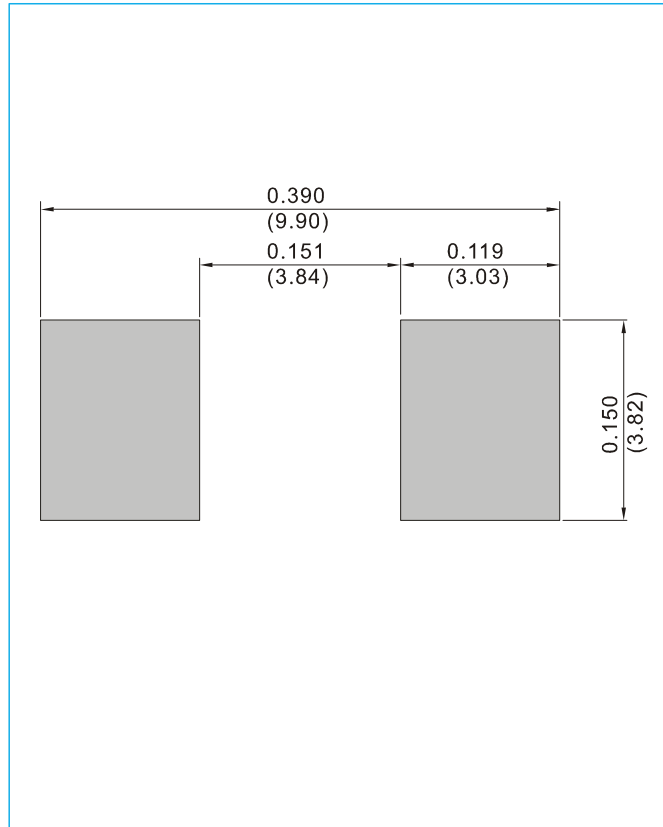


# S5A SERIES

## MOUNTING PAD LAYOUT

SMC / DO-214AB

Unit : inch(mm)



## ORDER INFORMATION

- Packing information  
T/R - 3K per 13" plastic Reel  
T/R - 0.5K per 7" plastic Reel



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## Part No\_packing code\_Version

S5A\_R1\_00001

S5A\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



| Packing Code <b>XX</b>               |                      |                                  |                      | Version Code <b>XXXXX</b> |                      |                                       |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| 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 |
| Tape and Ammunition Box (T/B)        | A                    | N/A                              | 0                    | HF                        | 0                    | serial number                         |
| Tape and Reel (T/R)                  | R                    | 7"                               | 1                    | RoHS                      | 1                    | serial number                         |
| Bulk Packing (B/P)                   | B                    | 13"                              | 2                    |                           |                      |                                       |
| Tube Packing (T/P)                   | T                    | 26mm                             | X                    |                           |                      |                                       |
| Tape and Reel (Right Oriented) (TRR) | S                    | 52mm                             | Y                    |                           |                      |                                       |
| Tape and Reel (Left Oriented) (TRL)  | L                    | PANASERT T/B CATHODE UP (PBCU)   | U                    |                           |                      |                                       |
| FORMING                              | F                    | PANASERT T/B CATHODE DOWN (PBCD) | D                    |                           |                      |                                       |



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