



# SR32C THRU SR325C

## 3.0 AMP Surface Mount Schottky Barrier Rectifiers

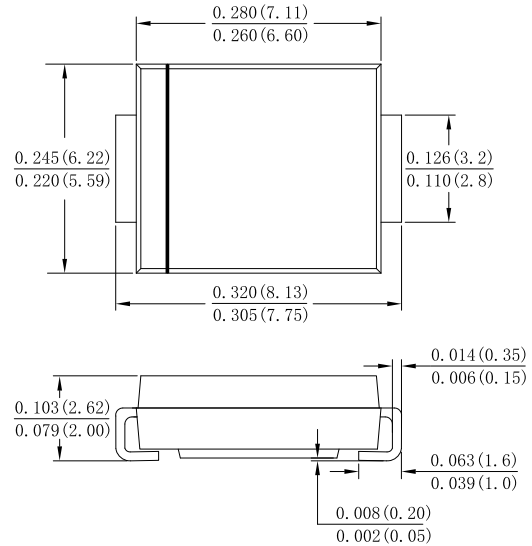
### Features

- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- 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: as marked as 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  | SYMBOL          | SR32C       | SR33C | SR34C | SR345C | SR35C | SR36C | SR38C | SR310C | SR315C | SR320C | SR325C | Unit                      |    |
|--|-----------------|-------------|-------|-------|--------|-------|-------|-------|--------|--------|--------|--------|---------------------------|----|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$       | 20          | 30    | 40    | 45     | 50    | 60    | 80    | 100    | 150    | 200    | 250    | V                         |    |
| Maximum RMS Voltage  | $V_{RMS}$       | 14          | 21    | 28    | 31     | 35    | 42    | 56    | 70     | 105    | 140    | 175    | V                         |    |
| Maximum DC Blocking Voltage  | $V_{DC}$        | 20          | 30    | 40    | 45     | 50    | 60    | 80    | 100    | 150    | 200    | 250    | V                         |    |
| Average Rectified Output Current<br>@ $T_L = 100^\circ\text{C}$  | $I_F(AV)$       | 3.0         |       |       |        |       |       |       |        |        |        |        | A                         |    |
| Peak Forward Surge Current 8.3ms Single<br>half sine-wave superimposed on rated load<br>(JEDEC Method) | $I_{FSM}$       | 80          |       |       |        |       |       |       |        |        |        |        | A                         |    |
| $I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )  | $I^2t$          | 26.56       |       |       |        |       |       |       |        |        |        |        | $\text{A}^2\text{s}$      |    |
| Forward Voltage @ $I_F=3.0\text{A}$  | $V_{FM}$        | 0.55        |       |       | 0.7    |       |       | 0.85  | 0.92   | 0.95   |        |        | V                         |    |
| Peak Reverse Current @ $T_J = 25^\circ\text{C}$  | $I_R$           | 0.1         |       |       |        |       |       | 0.01  |        |        |        |        |                           | mA |
| At Rated DC Blocking Voltage @ $T_J = 125^\circ\text{C}$   |                 | 10          |       |       |        |       |       | 0.25  |        |        |        |        |                           |    |
| Typical Junction Capacitance (Note 1)  | $C_J$           | 12          |       |       |        |       |       |       |        |        |        |        | pF                        |    |
| Typical Thermal Resistance per leg (Note2)   | $R_{\theta JL}$ | 18          |       |       |        |       |       |       |        |        |        |        | $^\circ\text{C}/\text{W}$ |    |
| Operating Temperature Range  | $T_J$           | -55 to +150 |       |       |        |       |       |       |        |        |        |        | $^\circ\text{C}$          |    |
| Storage Temperature Range  | $T_{STG}$       | -55 to +150 |       |       |        |       |       |       |        |        |        |        | $^\circ\text{C}$          |    |

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2. Thermal Resistance from Junction to Ambient at 0.375(9.5mm) lead length .



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Fig. 1 Forward Current Derating Curve

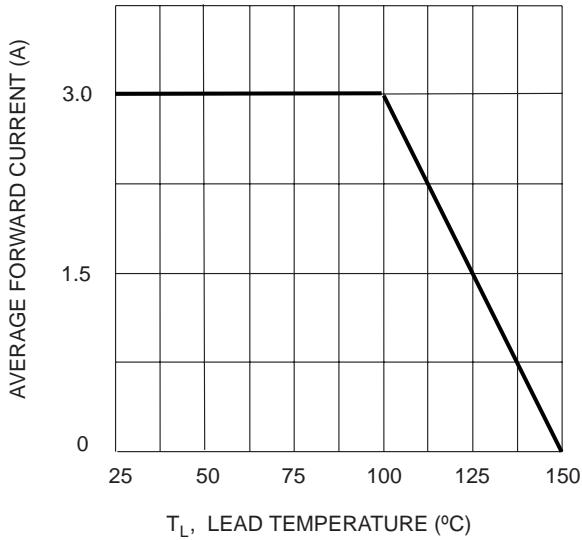


Fig. 2 Typ. Forward Characteristics

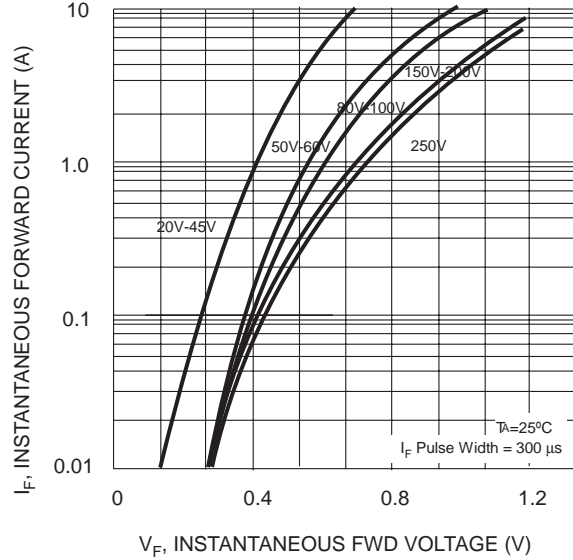


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

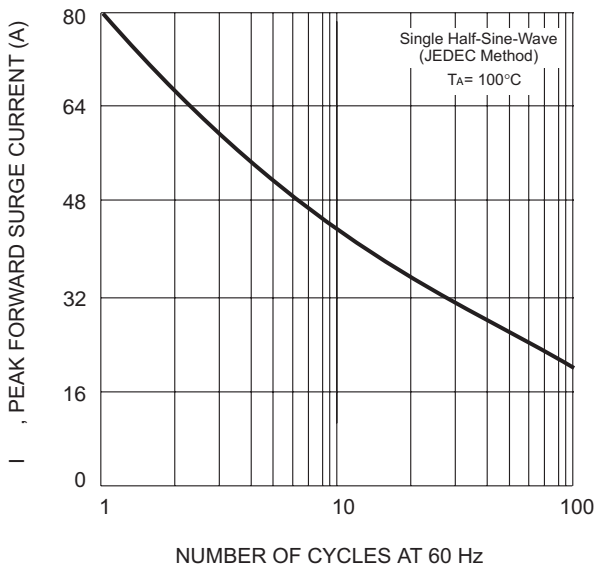


FIG.4 TYPICAL REVERSE CHARACTERISTIC

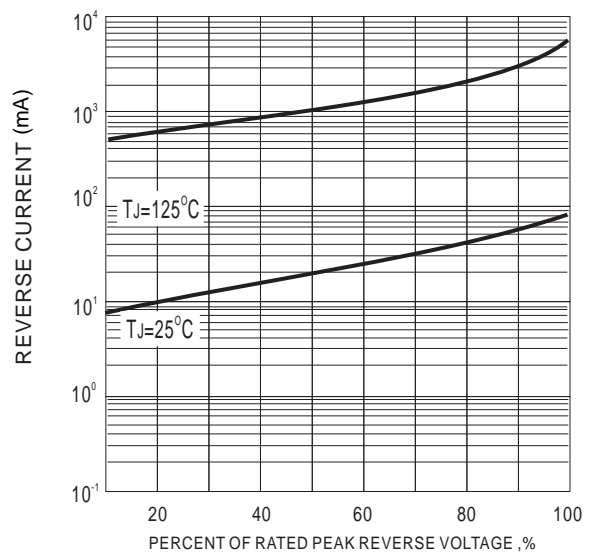
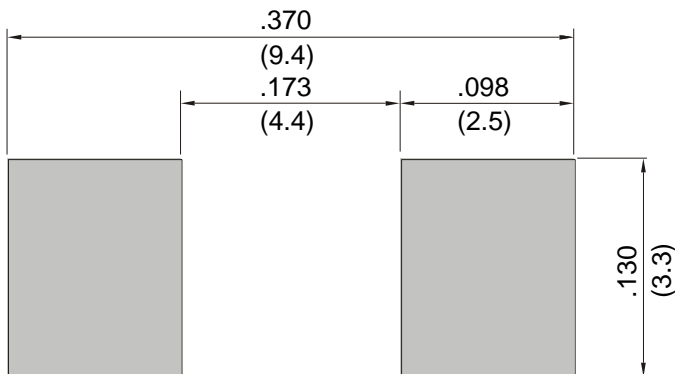


FIG.5 MOUNTING PAD LAYOUT





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