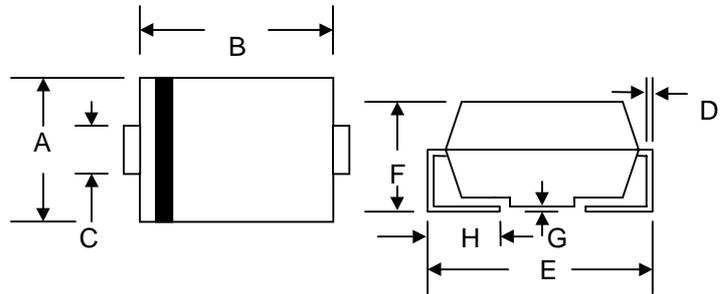


## 2.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)

| SMA/DO-214AC         |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 2.50  | 2.90  |
| B                    | 4.00  | 4.60  |
| C                    | 1.40  | 1.60  |
| D                    | 0.152 | 0.305 |
| E                    | 4.80  | 5.28  |
| F                    | 2.00  | 2.44  |
| G                    | 0.051 | 0.203 |
| H                    | 0.76  | 1.52  |
| All Dimensions in mm |       |       |

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic  | Symbol          | SR22        | SR23 | SR24 | SR25 | SR26 | SR28 | SR29 | Unit             |    |
|---|-----------------|-------------|------|------|------|------|------|------|------------------|----|
| Peak Repetitive Reverse Voltage   | $V_{RRM}$       |             |      |      |      |      |      |      |                  |    |
| Working Peak Reverse Voltage  | $V_{RWM}$       | 20          | 30   | 40   | 50   | 60   | 80   | 90   | V                |    |
| DC Blocking Voltage   | $V_R$           |             |      |      |      |      |      |      |                  |    |
| RMS Reverse Voltage   | $V_{R(RMS)}$    | 14          | 21   | 28   | 35   | 42   | 56   | 64   | V                |    |
| Average Rectified Output Current @ $T_L = 105^\circ\text{C}$  | $I_O$           | 2.0         |      |      |      |      |      |      | A                |    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | $I_{FSM}$       | 50          |      |      |      |      |      |      | A                |    |
| Forward Voltage @ $I_F = 2.0\text{A}$   | $V_{FM}$        | 0.50        |      |      | 0.70 |      | 0.85 |      | V                |    |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$<br>At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$           | $I_{RM}$        | 0.5         |      |      |      |      | 20   |      |                  | mA |
| Typical Thermal Resistance Junction to Ambient<br>(Note 1)  | $R_{\theta JA}$ | 75          |      |      |      |      |      |      | K/W              |    |
| Operating Temperature Range   | $T_j$           | -65 to +125 |      |      |      |      |      |      | $^\circ\text{C}$ |    |
| Storage Temperature Range   | $T_{STG}$       | -65 to +150 |      |      |      |      |      |      | $^\circ\text{C}$ |    |

Note: 1. Mounted on P.C. Board with 8.0mm<sup>2</sup> copper pad areas

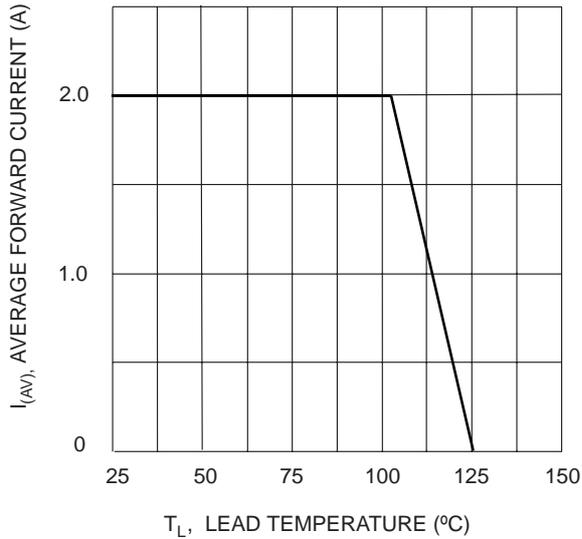


Fig. 1 Forward Current Derating Curve

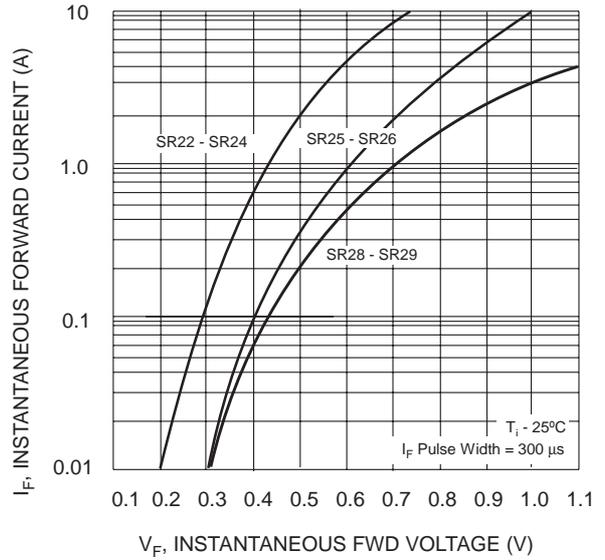


Fig. 2 Typ. Forward Characteristics

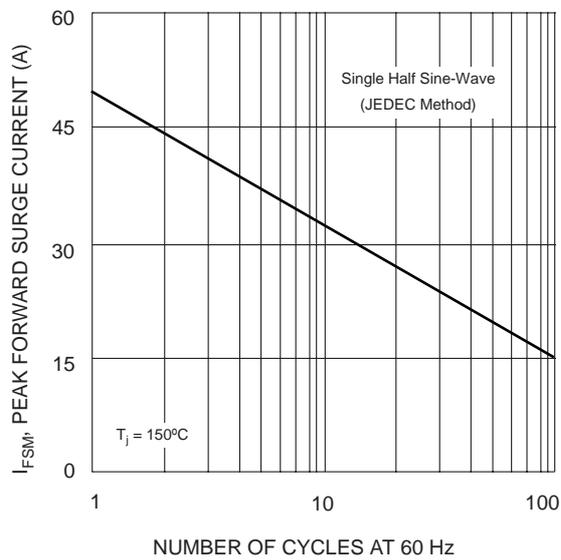


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

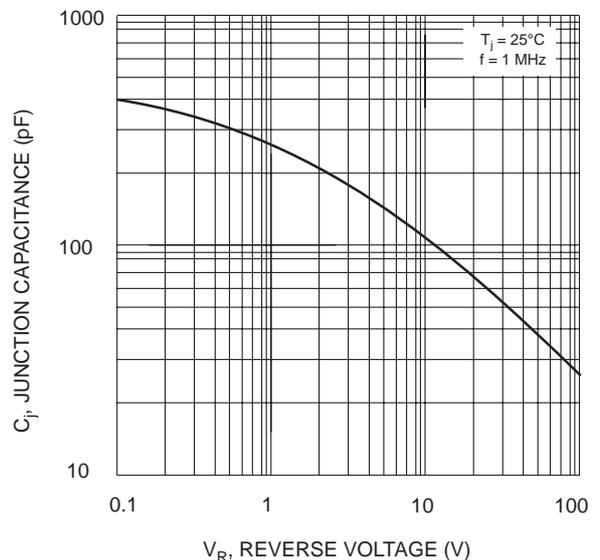


Fig. 4 Typical Junction Capacitance

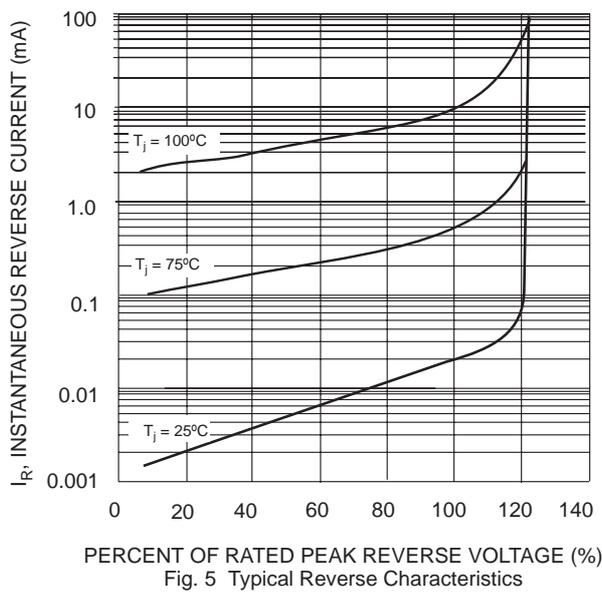


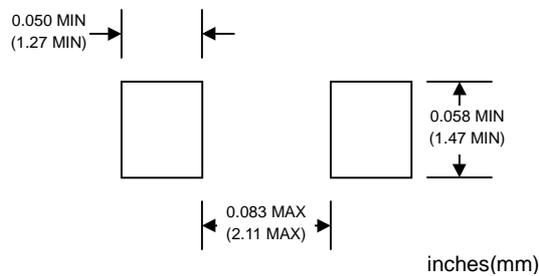
Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

| Product No.♦   | Package Type | Shipping Quantity |
|----------------|--------------|-------------------|
| SR22-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR22-T3</b> | SMA          | 7500/Tape & Reel  |
| SR23-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR23-T3</b> | SMA          | 7500/Tape & Reel  |
| SR24-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR24-T3</b> | SMA          | 7500/Tape & Reel  |
| SR25-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR25-T3</b> | SMA          | 7500/Tape & Reel  |
| SR26-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR26-T3</b> | SMA          | 7500/Tape & Reel  |
| SR28-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR28-T3</b> | SMA          | 7500/Tape & Reel  |
| SR29-T1        | SMA          | 1800/Tape & Reel  |
| <b>SR29-T3</b> | SMA          | 7500/Tape & Reel  |

Products listed in **bold** are WTE Preferred devices.  
 ♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.  
 Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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