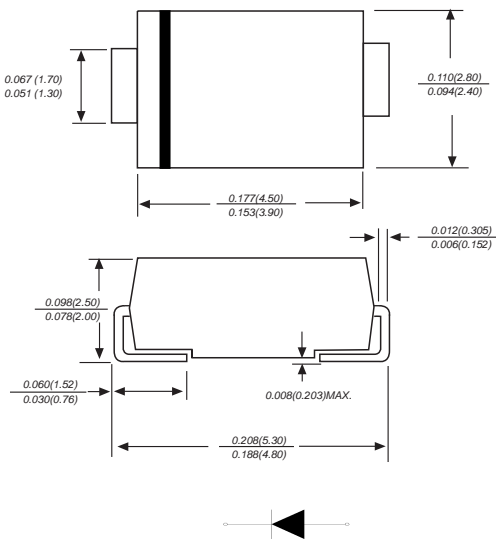


## 2.0Amp Fast Recovery Surface Mounted Rectifiers

### DO-214AC/SMA



Dimensions in inches and (millimeters)

### Features

- ▶ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ▶ Idea for printed circuit board
- ▶ Glass passivated Junction chip
- ▶ Low reverse leakage
- ▶ High forward surge current capability
- ▶ High temperature soldering guaranteed 250°C/10 seconds at terminals

### Mechanical Data

**Case :** Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method 2026

**Polarity :** Polarity symbol marking on body

**Mounting Position :** Any

**Weight :** 0.0023 ounce, 0.07 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 current derate by 20%.

| Parameter   | SYMBOLS        | RS2A        | RS2B | RS2D | RS2G | RS2J | RS2K | RS2M | UNITS              |
|---|----------------|-------------|------|------|------|------|------|------|--------------------|
| Maximum repetitive 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 at $T_L=100^\circ\text{C}$                                      | $I_{(AV)}$     | 2.0         |      |      |      |      |      |      | A                  |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load                        | $I_{FSM}$      | 50.0        |      |      |      |      |      |      | A                  |
| Maximum instantaneous forward voltage at 2.0A   | $V_F$          | 1.30        |      |      |      |      |      |      | V                  |
| Maximum DC reverse current $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage $T_A=125^\circ\text{C}$ | $I_R$          | 5.0<br>500  |      |      |      |      |      |      | $\mu\text{A}$      |
| Maximum reverse recovery time (Note 1)  | $T_{rr}$       | 150         |      |      |      | 250  | 500  | ns   |                    |
| Typical junction capacitance (Note 2)   | $C_J$          | 50.0        |      |      |      |      |      |      | pF                 |
| Typical thermal resistance  | $R_{qJA}$      | 80.0        |      |      |      |      |      |      | $^\circ\text{C/W}$ |
| Operating junction and storage temperature range  | $T_J, T_{STG}$ | -55 to +150 |      |      |      |      |      |      | $^\circ\text{C}$   |

**Ratings And Characteristic Curves**

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

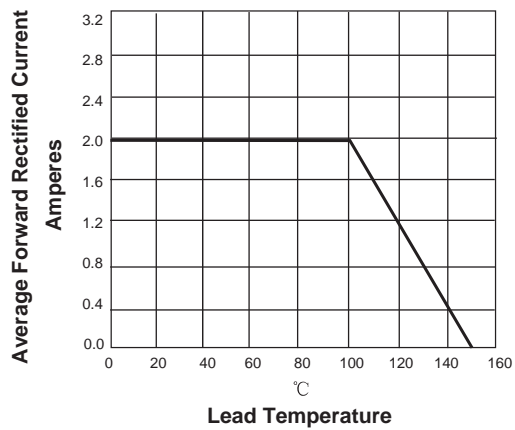


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

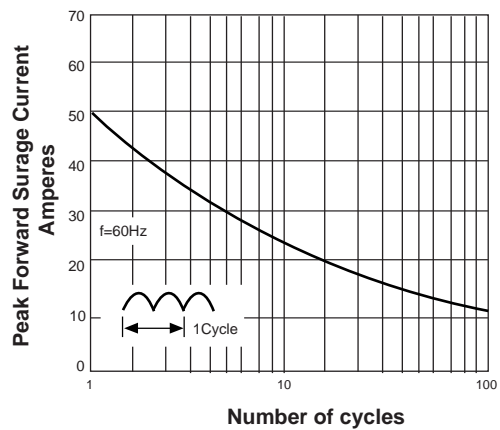


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

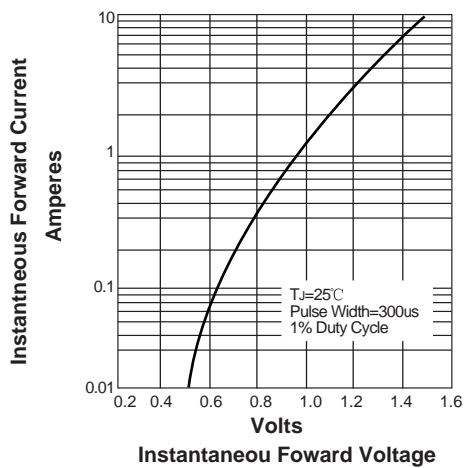


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

