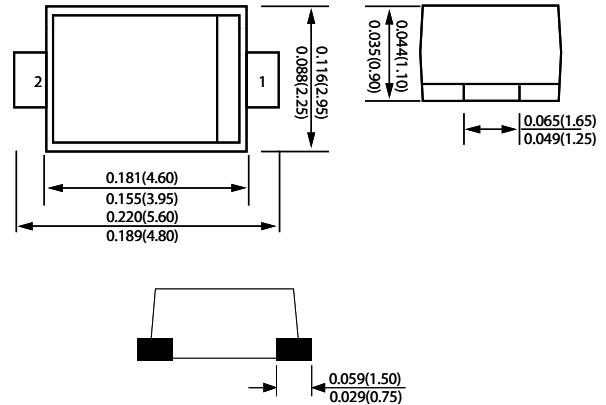
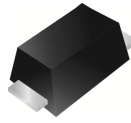


**2.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V-200V  
SMAF(DO-221AC) PACKAGE**

**FEATURES**

- \* Low profile package
- \* Ideal for automated placement
- \* Guard Ring for over voltage protection
- \* Low forward voltage drop
- \* RoHS Product for packing code suffix "G",  
Halogen free product for packing code suffix "H"



Dimensions in inches and (millimeters)

**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%

| RATINGS  | SYMBOL                             | SK22AF      | SK23AF | SK24AF | SK25AF | SK26AF | SK28AF | SK210AF | SK215AF     | SK220AF | UNIT  |    |
|--|------------------------------------|-------------|--------|--------|--------|--------|--------|---------|-------------|---------|-------|----|
| Marking Code   |                                    | 22AF        | 23AF   | 24AF   | 25AF   | 26AF   | 28AF   | 210AF   | 215AF       | 220AF   |       |    |
| Maximum Recurrent Peak Reverse Voltage   | V <sub>RRM</sub>                   | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150         | 200     | Volts |    |
| Maximum RMS Voltage  | V <sub>RMS</sub>                   | 14          | 21     | 28     | 35     | 42     | 56     | 70      | 105         | 140     | Volts |    |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>                    | 20          | 30     | 40     | 50     | 60     | 80     | 100     | 150         | 200     | Volts |    |
| Maximum Average Forward Rectified Current<br>0.375" (9.5mm) lead length (see Fig.1)                  | I <sub>o</sub>                     | 2.0         |        |        |        |        |        |         |             |         | Amps  |    |
| Peak Forward Surge Current 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | I <sub>FSM</sub>                   | 50          |        |        |        |        |        |         |             |         | Amps  |    |
| Typical Thermal Resistance (Note 1)  | R <sub>ΘJA</sub> /R <sub>ΘJC</sub> | 120/90      |        |        |        |        |        |         |             |         | °C/W  |    |
| Typical Junction Capacitance (Note 2)  | C <sub>J</sub>                     | 70          |        |        | 50     |        |        | 40      |             |         | pF    |    |
| Operating Temperature Range  | T <sub>J</sub>                     | -55 to +125 |        |        |        |        |        |         | -55 to +150 |         |       | °C |
| Storage Temperature Range  | T <sub>STG</sub>                   | -55 to +150 |        |        |        |        |        |         |             |         | °C    |    |

| CHARACTERISTICS   | SYMBOL         | SK22AF | SK23AF | SK24AF | SK25AF | SK26AF | SK28AF | SK210AF | SK215AF | SK220AF | UNIT |       |
|---|----------------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------|-------|
| Maximum Instantaneous Forward Voltage at 2.0A DC(Note)          | V <sub>F</sub> | 0.45   | 0.5    |        |        | 0.70   |        | 0.85    |         | 0.87    | 0.90 | Volts |
| Maximum Average Reverse Current at<br>Rated DC Blocking Voltage | @TC=25°C       | 0.5    |        |        |        |        | 0.2    |         |         |         |      | mAmps |
|   | @TC=100°C      | 15     |        |        |        |        | 5      |         |         |         |      |       |

NOTES :1. Thermal Resistance for Junction to Ambient: Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

Thermal Resistance for Junction to Case

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. Measured at Pulse Width 300µs, Duty Cycle 2%.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

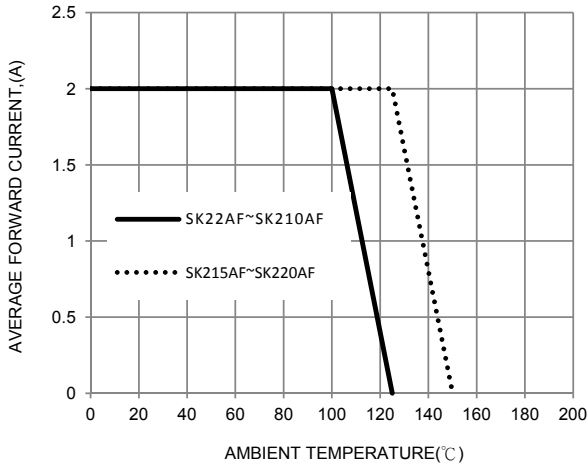


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

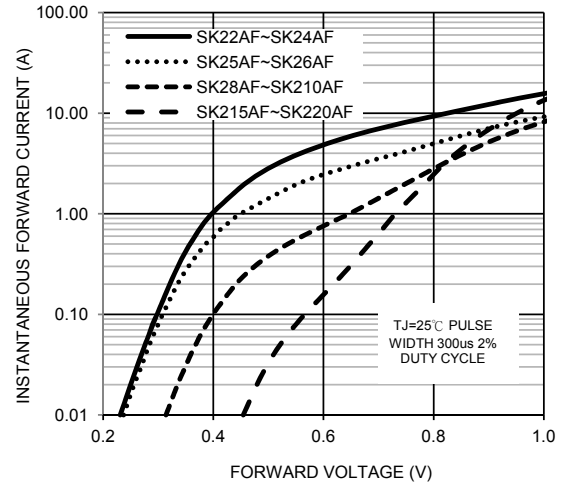


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

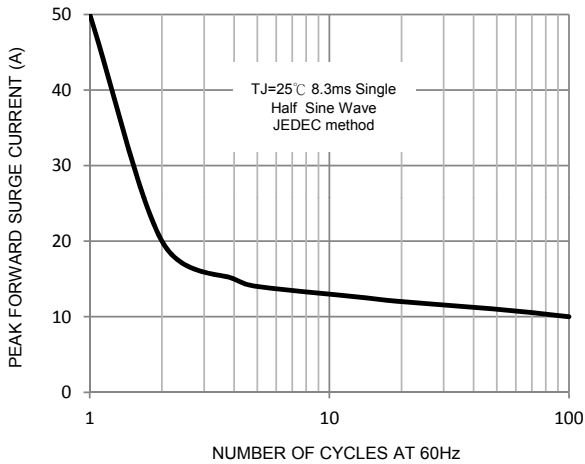


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

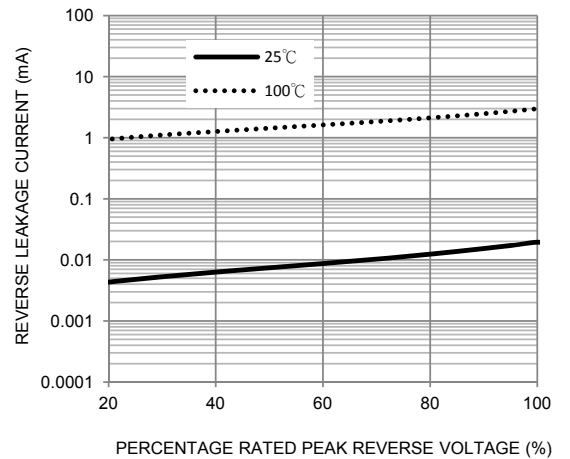


FIG. 5-TYPICAL JUNCTION CAPACITANCE

