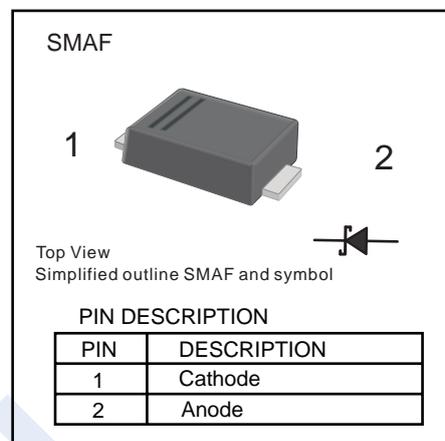


Schottky Diodes

1KK2202AF ~ 1KK2220AF

■ Features

- Reverse Voltage - 20 to 200 V
- Forward Current - 2.0 A
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



■ Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | Symbols | 1KK 2202AF | 1KK 2204AF | 1KK 2206AF | 1KK 2208AF | 1KK 2210AF | 1KK 2212AF | 1KK 2215AF | 1KK 2220AF | Unit | |
|---|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 40 | 60 | 80 | 100 | 120 | 150 | 200 | V | |
| Maximum RMS voltage | V_{RMS} | 14 | 28 | 42 | 56 | 70 | 84 | 105 | 140 | | |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 40 | 60 | 80 | 100 | 120 | 150 | 200 | | |
| Maximum Instantaneous Forward Voltage at 2A | V_F | 0.55 | | 0.70 | | 0.85 | | 0.95 | | A | |
| Maximum Averaged Forward Rectified Current | $I_{F(AV)}$ | 2.0 | | | | | | | | | |
| Peak Forward Surge Current, 8.3 ms Single Half Sine Wave Superimposed on Rated Load | I_{FSM} | 50 | | | | | | | | | |
| Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at rated DC blocking voltage $T_a=100^\circ\text{C}$ | I_R | 0.5 | | | 0.3 | | | 3 | | | mA |
| Typical Junction Capacitance *1 | C_j | 220 | | | 80 | | | | | | pF |
| Typical Thermal Resistance *2 | $R_{\theta JA}$ | 80 | | | | | | | | | °C/W |
| Operating Junction Temperature Range | T_j | -55 ~ +125 | | | | | | | | | °C |
| Storage Temperature Range | T_{stg} | -55 ~ +150 | | | | | | | | | |

* 1 Measured at 1MHz and applied reverse voltage of 4V D.C.

* 2 P.C.B. mounted with 2.0" x2.0" (5x5 cm) copper pad areas.

■ Marking

| NO. | 1KK 2202AF | 1KK 2204AF | 1KK 2206AF | 1KK 2208AF | 1KK 2210AF | 1KK 2212AF | 1KK 2215AF | 1KK 2220AF |
|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Marking | 2A02 | 2A04 | 2A06 | 2A08 | 2A10 | 2A12 | 2A15 | 2A20 |

Schottky Diodes

1KK2202AF ~ 1KK2220AF

■ Typical Characteristics

Fig.1 Forward Current Derating Curve

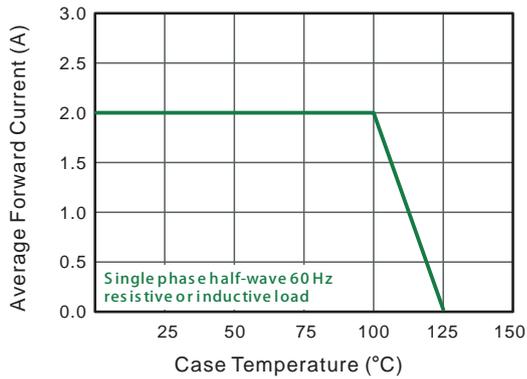


Fig.2 Typical Reverse Characteristics

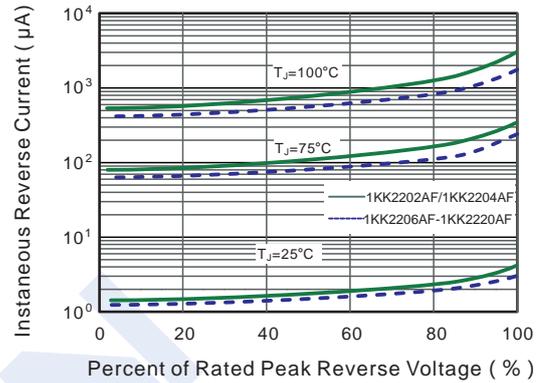


Fig.3 Typical Forward Characteristic

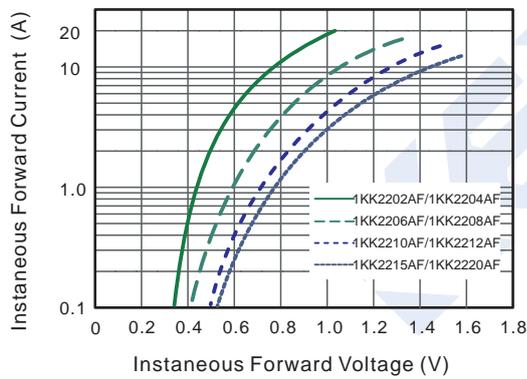


Fig.4 Typical Junction Capacitance

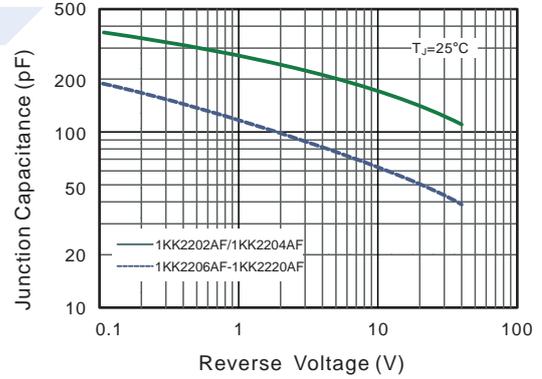


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

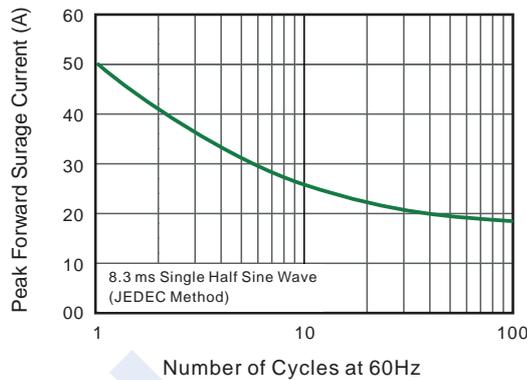
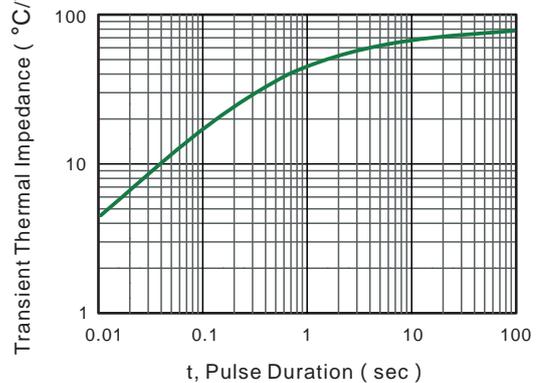


Fig.6- Typical Transient Thermal Impedance



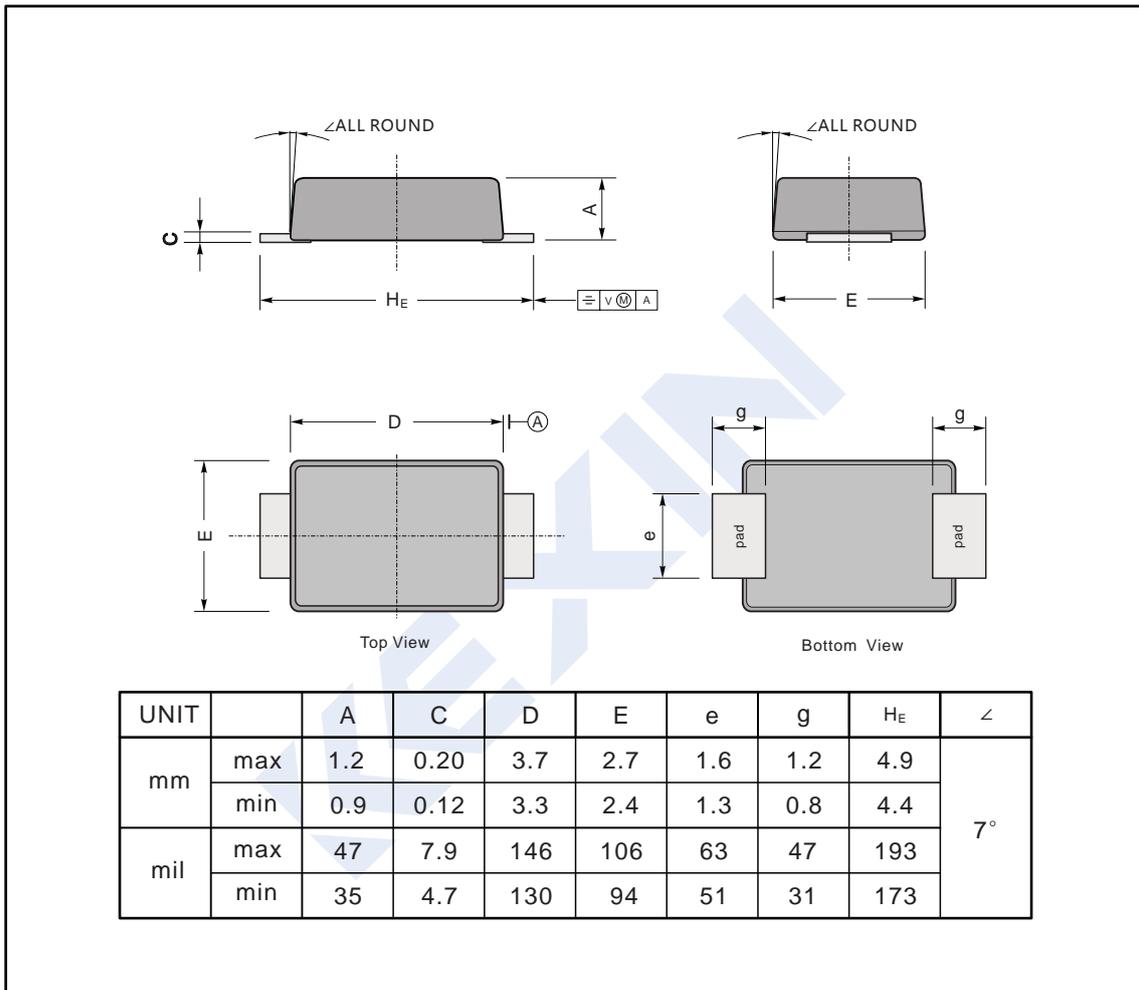
Schottky Diodes

1KK2202AF ~ 1KK2220AF

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SMAF



■ The recommended mounting pad size

