

Schottky Barrier Rectifiers

PRODUCT SUMMARY

Surface Mount
Reverse Voltage 20 to 60 Volts
Forward Current 2.0 Amperes



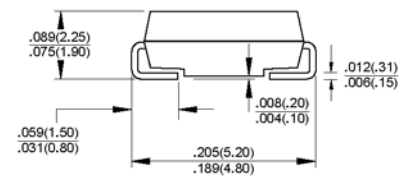
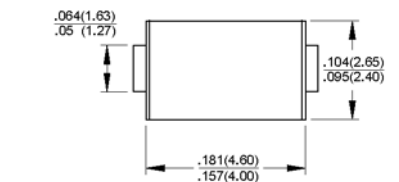
FEATURES

For surface mounted applications
Metal-Semiconductor junction with guardring
Epitaxial construction
Very low forward voltage drop
High current capability
Plastic material has UL flammability classification 94V-0
For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

Case : JEDEC DO-214AC(SMA) molded plastic
Polarity : Indicated by cathode band
Weight : 0.002 ounce, 0.064 gram

DO-214AC (SMA)



Dimensions in inches and (millimeters)



Pb-free; RoHS-compliant

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

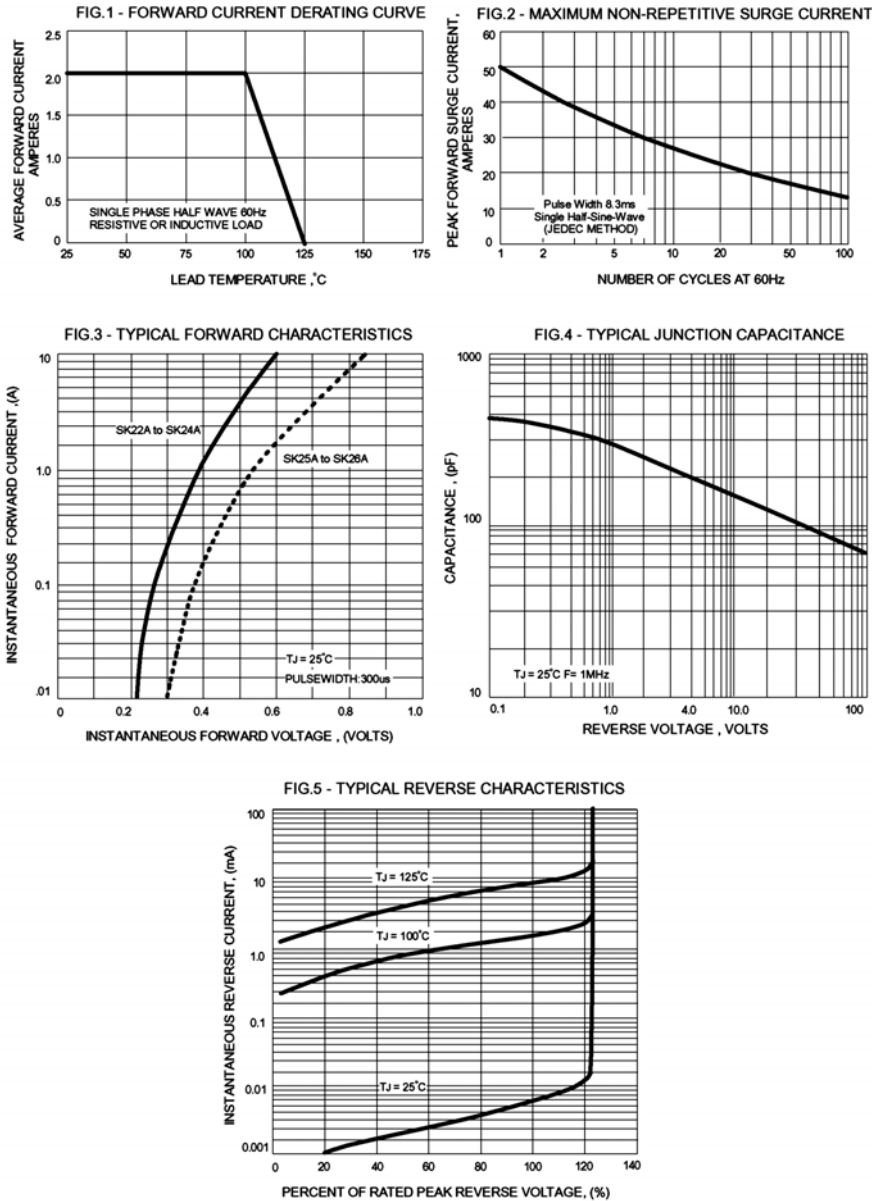
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| Parameter | Symbols | SK22A | SK23A | SK24A | SK25A | SK26A | Units |
|---|-----------------|-------------|-------|-------|-------|-------|-------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | Volts |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | Volts |
| Maximum average forward rectified current @ $T_L = 100^\circ\text{C}$ | $I_{(AV)}$ | 2.0 | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50.0 | | | | | Amps |
| Maximum forward voltage at 2.0A DC | V_F | 0.50 | | | 0.70 | | Volts |
| Maximum DC reverse current at rated DC blocking voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$ | I_R | 0.5 20 | | | | | mA |
| Typical junction capacitance (Note1) | C_J | 200 | | | | | pF |
| Typical thermal resistance (Note 2) | $R_{\theta JL}$ | 15 | | | | | °C/W |
| Operating junction temperature range | T_J | -55 to +125 | | | | | °C |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | °C |

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

RATINGS AND CHARACTERISTIC CURVES



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