SK12B THRU SK110B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

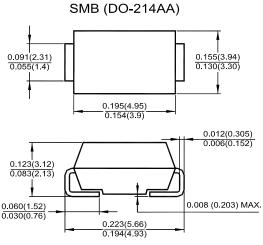
Reverse Voltage - 20 to 100 V Forward Current - 1 A

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- · For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- · Built in strain relief, ideal for automated placement
- · High forward surge current capability

Mechanical Data

- Case: JEDEC DO-214AA molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Symbols SK12B SK13B SK14B SK15B SK16B SK18B SK110B Units Parameter V Maximum Repetitive Peak Reverse Voltage V_{RRM} 20 30 40 50 60 80 100 28 Maximum RMS Voltage V_{RMS} 14 21 35 42 56 70 V Maximum DC Blocking Voltage V_{DC} 20 30 40 50 60 80 100 V Maximum Average Forward Rectified Current at TL 1 А I_{F(AV)} Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC 40 IFSM А Method) Maximum Instantaneous Forward Voltage at 1 A VF 0.45 0.55 0.7 0.85 V Maximum DC Reverse Current T_a = 25 °C 0.5 I_R mΑ at Rated DC Blocking Voltage T_a = 100 °C 6 5 Typical Junction Capacitance¹⁾ Ci 110 90 pF Typical Thermal Resistance²⁾ $R_{\theta JA}$ 88 °C/W **Operating Junction Temperature Range** - 65 to + 125 °C Tj - 65 to + 150 °C - 65 to + 150 Storage temperature range T_{stg}

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 %.

 $^{\rm 1)}$ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

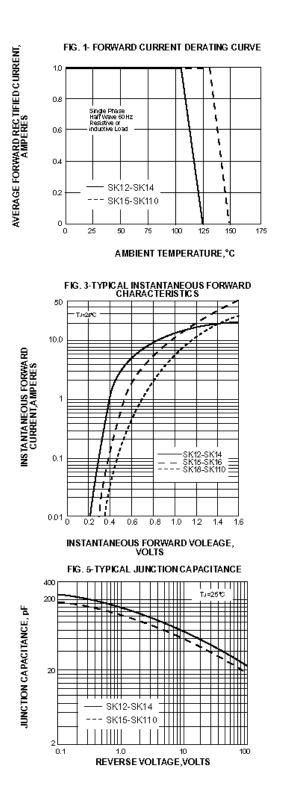
²⁾ P.C.B. mounted with 0.2 X 0.2 (5 X 5 mm) copper pad areas.

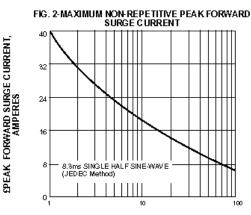


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TOP DYNAMIC

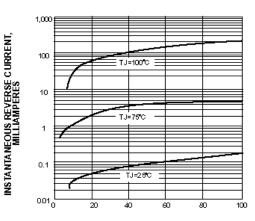
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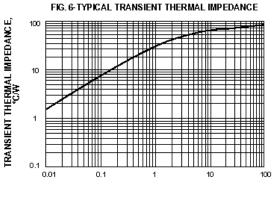


NUMBER OF CYCLES AT 60 Hz

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE,%



t, PULSE DURATION, sec.





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