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SK32 THRU SK310 SCHOTTKY RECTIFIER

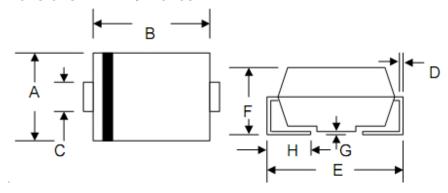
Features:

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.21 grams (approx.)

Mechanical Dimensions: In mm / Inches



| SMC/DO-214AB | | | | | | | |
|--------------|------|------|---------|-------|--|--|--|
| Dim | Min | Max | Min | Max | | | |
| Α | 5.59 | 6.22 | 0.220 | 0.245 | | | |
| В | 6.60 | 7.11 | 0.260 | 0.280 | | | |
| С | 2.75 | 3.25 | 0.108 | 0.128 | | | |
| D | 0.15 | 0.31 | 0.006 | 0.012 | | | |
| E | 7.75 | 8.13 | 0.305 | 0.320 | | | |
| F | 2.00 | 2.62 | 0.079 | 0.103 | | | |
| G | 0.05 | 0.20 | 0.002 | 0.008 | | | |
| Н | 0.76 | 1.27 | 0.030 | 0.050 | | | |
| | ln r | nm | In inch | | | | |

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Marking Diagram:



First row: Part Number (SK32, SK33, SK34, SK35, SK36, SK38, SK39, SK310)

Second row: YYWWL

YY is the manufacture year, WW is the manufacture week code, L is the wafer's Lot Number

Ordering Information:

| Device | Package | Shipping |
|--------|-----------|----------------|
| SK32 | | |
| SK33 | | |
| SK34 | | |
| SK35 | SMC | 2000mag / rool |
| SK36 | (Pb-Free) | 3000pcs / reel |
| SK38 | , , | |
| SK39 | | |
| SK310 | | |

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

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Maximum Ratings and Electrical characteristics @T_A = 25°C unless otherwise specified

| Characteristic | Symbol | SK32 | SK33 | SK34 | SK35 | SK36 | SK38 | SK39 | SK310 | Unit |
|---|--|----------------|------|------|------|------|------|------|-------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | $egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$ | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 64 | 71 | V |
| Average Rectified Output Current @T _L = 75°C | Io | 3.0 | | | | | | | Α | |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 100 | | | | | | Α | | |
| Forward Voltage @ I _F = 3.0 A | V _F | 0.55 0.75 0.85 | | | | | V | | | |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C | I _{RM} | 0.5 20 | | | | | | mA | | |
| Typical Thermal Resistance Junction to Ambient (Note 1) | $R_{\theta JA}$ | 55 | | | | | °C/W | | | |
| Operating Temperature Range | TJ | -65 to +125 | | | | | | °C | | |
| Storage Temperature Range | T _{STG} | -65 to +150 | | | | | | °C | | |

Note: 1. Mounted on P.C. Board with 14mm² copper pad areas.

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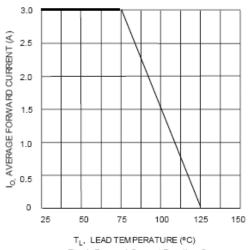
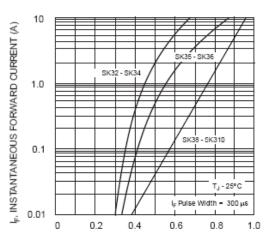
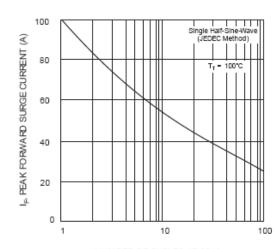


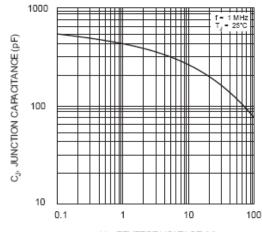
Fig. 1 Forward Current Derating Curve



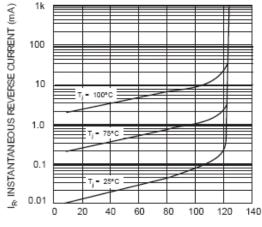
VF, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz Fi . 3 Max Non-Repetitive Peak Fwd Sur e Current



V_R, REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5. Typical Reverse Characteristics

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