



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

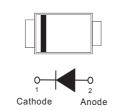
VOLTAGE 20 to 60 Volt CURRENT 5 Ampere

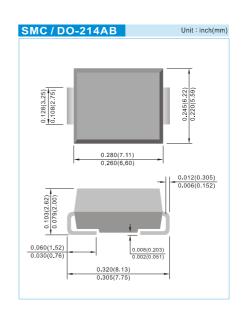
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounce, 0.2325 gram





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

| PARAMETER | SYMBOL | SK52 | SK53 | SK54 | SK55 | SK56 | UNITS |
|---|-------------------------------|-------------------------|------|------|-----------|------|--------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | V |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | V |
| Maximum DC Blocking Voltage | | 20 | 30 | 40 | 50 | 60 | V |
| Maximum Average Forward Rectified Current at T _L =75°C | I _{F(AV)} | 5 | | | | | А |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 100 | | | | | А |
| Maximum Forward Voltage at 5A (Note 1) | V _F | 0.55 | | | 0.75 | | V |
| Maximum DC Reverse Current at Rated DC Blocking $T_J=25^{\circ}C$ Voltage $T_J=100^{\circ}C$ | I _R | 0.2 20 | | | 0.1 20 | | mA |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL} R_{\theta JA}$ | 17 55 | | | | | °C / W |
| Operating Junction Temperature Range | TJ | -55 to +125 -55 to +150 | | | °C | | |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | °C | |

NOTES:

- 1. Pulse Test with PW =300 μ sec, 1% Duty Cycle.
- 2. Mounted on P.C. Board with 14mm² (0.013mm thick) copper pad areas.

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RATING AND CHARACTERISTIC CURVES

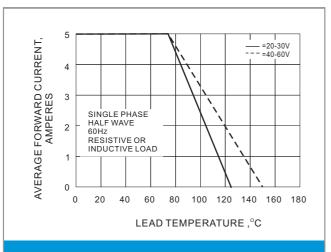


Fig.1- FORWARD CURRENT DERATING CURVE

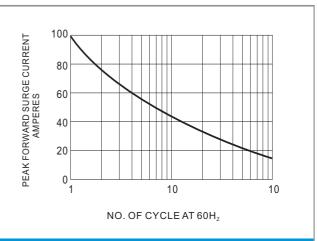


Fig.2 -MAXIMUM NON-REPETITIVE SURGE CURRENT

50-60\

TA=25°C

1.0

0.8

20-40V

10

1.0

0.1 0.2

FORWARD CURRENT, AMPERES

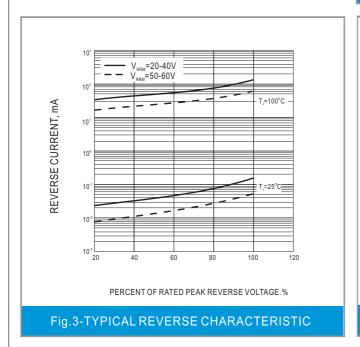


Fig.4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

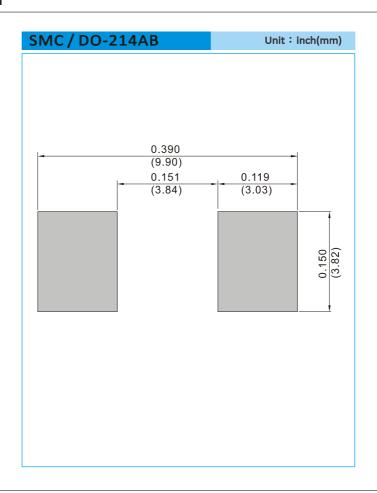
0.6 FORWARD VOLTAGE, VOLTS

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MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R - 3K per 13" plastic Reel

T/R - 0.5K per 7" plastic Reel





Part No_packing code_Version

SK52_R1_00001 SK52_R2_00001

For example:



| Packing Code XX | | | | Version Code XXXXX | | | | |
|--------------------------------------|----------------------|-----------------------------------|----------------------|--------------------|----------------------|---------------------------------------|--|--|
| Packing type | 1 st Code | Packing size code | 2 nd Code | HF or RoHS | 1 st Code | 2 nd ~5 th Code | | |
| Tape and Ammunition Box (T/B) | Α | N/A | 0 | HF | 0 | serial number | | |
| Tape and Reel (T/R) | R | 7" | 1 | RoHS | 1 | serial number | | |
| Bulk Packing (B/P) | В | 13" | 2 | | | | | |
| Tube Packing (T/P) | Т | 26mm | X | | | | | |
| Tape and Reel (Right Oriented) (TRR) | S | 52mm | Y | | | | | |
| Tape and Reel (Left Oriented) (TRL) | L | PANASERT T/B CATHODE UP (PBCU) | U | | | | | |
| FORMING | F | PANASERT T/B CATHODE DOWN (PBCD) | D | | | | | |

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