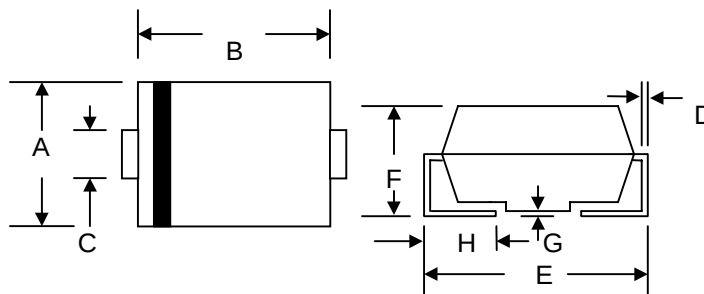


## 3.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 100A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



### Mechanical Data

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

| SMC/DO-214AB         |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 5.59  | 6.22  |
| B                    | 6.60  | 7.11  |
| C                    | 2.75  | 3.25  |
| D                    | 0.152 | 0.305 |
| E                    | 7.75  | 8.13  |
| F                    | 2.00  | 2.62  |
| G                    | 0.051 | 0.203 |
| H                    | 0.76  | 1.27  |
| All Dimensions in mm |       |       |

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

| Characteristic                                                                                                        | Symbol                                                 | SK32 | SK33 | SK34 | SK35 | SK36 | SK38 | SK39 | S310 | Unit |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|------|------|------|------|------|------|------|------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | V <sub>RRM</sub><br>V <sub>RWM</sub><br>V <sub>R</sub> | 20   | 30   | 40   | 50   | 60   | 80   | 90   | 100  | V    |
| RMS Reverse Voltage                                                                                                   | V <sub>R(RMS)</sub>                                    | 14   | 21   | 28   | 35   | 42   | 56   | 64   | 71   | V    |
| Average Rectified Output Current    @T <sub>L</sub> = 75°C                                                            | I <sub>O</sub>                                         | 3.0  |      |      |      |      |      |      |      | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | I <sub>FSM</sub>                                       | 100  |      |      |      |      |      |      |      | A    |
| Forward Voltage                                                                                                       |                                                        |      |      |      |      |      |      |      |      |      |

Note: 1. Mounted on P.C. Board with 14mm<sup>2</sup> copper pad areas

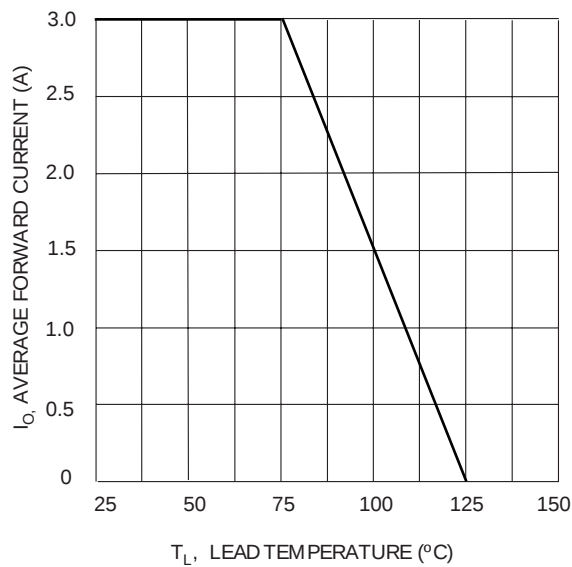


Fig. 1 Forward Current Derating Curve

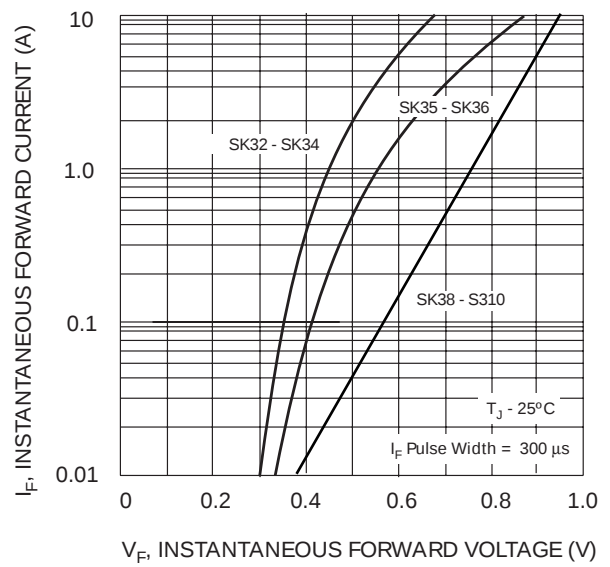


Fig. 2 Typical Forward Characteristics

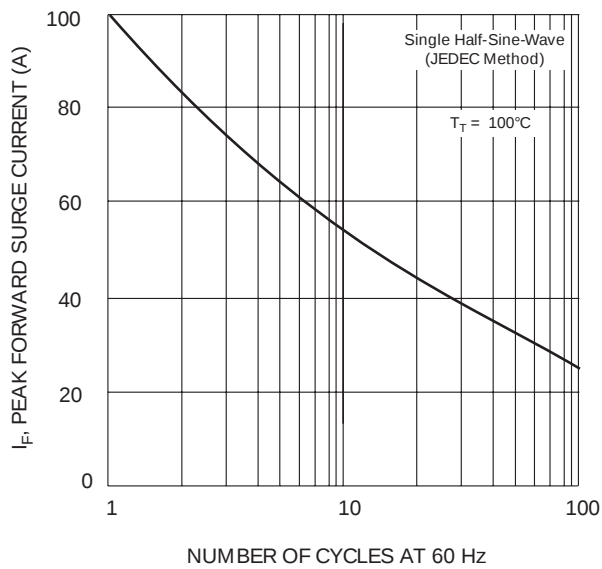


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

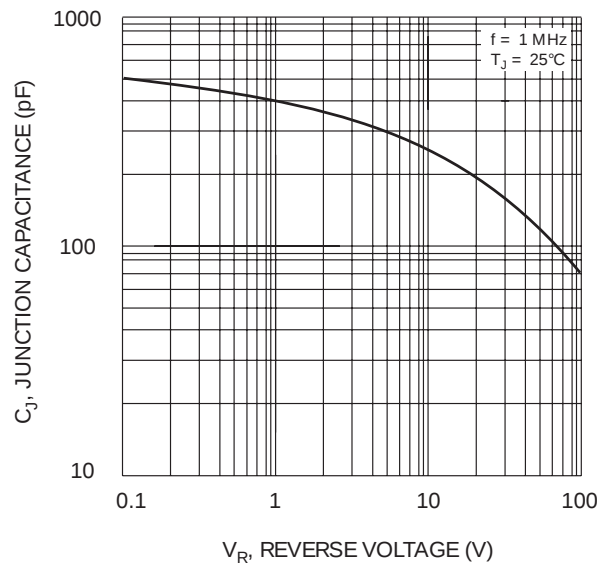


Fig. 4 Typical Junction Capacitance

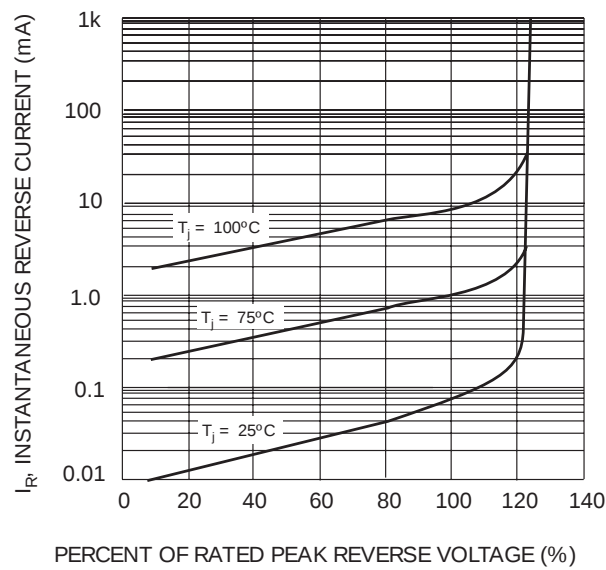


Fig. 5 Typical Reverse Characteristics

## ORDERING INFORMATION

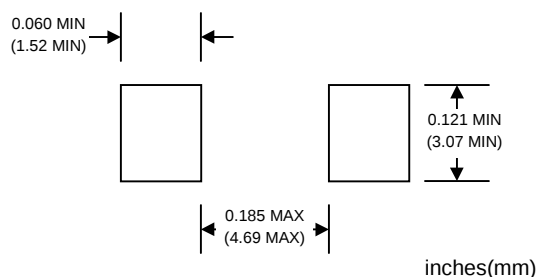
| Product No.♦   | Package Type | Shipping Quantity |
|----------------|--------------|-------------------|
| SK32-T1        | SMC          | 500/Tape & Reel   |
| <b>SK32-T3</b> | SMC          | 3000/Tape & Reel  |
| SK33-T1        | SMC          | 500/Tape & Reel   |
| <b>SK33-T3</b> | SMC          | 3000/Tape & Reel  |
| SK34-T1        | SMC          | 500/Tape & Reel   |
| <b>SK34-T3</b> | SMC          | 3000/Tape & Reel  |
| SK35-T1        | SMC          | 500/Tape & Reel   |
| <b>SK35-T3</b> | SMC          | 3000/Tape & Reel  |
| SK36-T1        | SMC          | 500/Tape & Reel   |
| <b>SK36-T3</b> | SMC          | 3000/Tape & Reel  |
| SK38-T1        | SMC          | 500/Tape & Reel   |
| <b>SK38-T3</b> | SMC          | 3000/Tape & Reel  |
| SK39-T1        | SMC          | 500/Tape & Reel   |
| <b>SK39-T3</b> | SMC          | 3000/Tape & Reel  |
| S310-T1        | SMC          | 500/Tape & Reel   |
| <b>S310-T3</b> | SMC          | 3000/Tape & Reel  |

Products listed in **bold** are WTE Preferred devices.

♦T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

### Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

Phone: 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417

Email: sales@wontop.com

Internet: <http://www.wontop.com>

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