



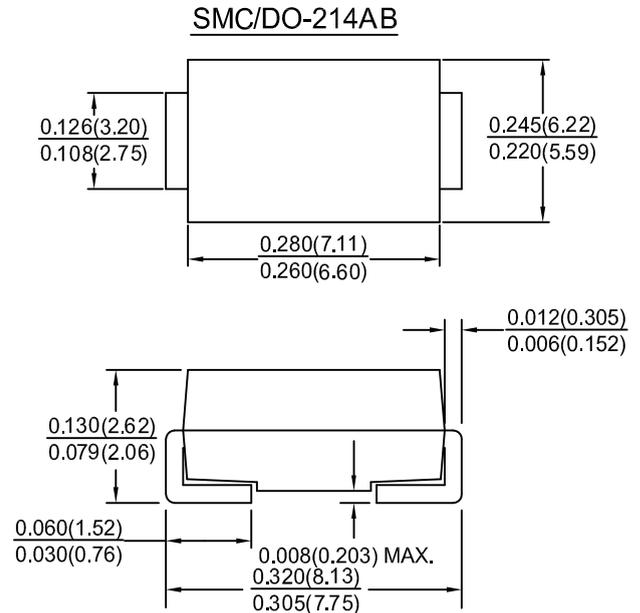
**SURFACE MOUNT SCHOTTKY RECTIFIERS**

**FEATURES:**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guard ring for overvoltage protection
- High temperature soldering guaranteed:  
250° C/10 seconds at terminals

**MECHANICAL DATA**

Case : JEDEC DO-214AB molded plastic body  
 Terminals : Solder plated, solderable per MIL-STD-750 Method 2026  
 Polarity : Color band on body denotes cathode end  
 Weight : 0.007 ounce, 0.021 grams



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 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%.

| Characteristic   | Symbol     | SK52      | SK53 | SK54 | SK55 | SK56 | SK58 | SK5A0 | Units |
|--|------------|-----------|------|------|------|------|------|-------|-------|
| Maximum recurrent peak reverse voltage   | $V_{RRM}$  | 20        | 30   | 40   | 50   | 60   | 80   | 100   | Volts |
| Maximum RMS voltage  | $V_{RMS}$  | 14        | 21   | 28   | 35   | 42   | 56   | 70    | Volts |
| Maximum DC blocking voltage  | $V_{DC}$   | 20        | 30   | 40   | 50   | 60   | 80   | 100   | Volts |
| Maximum average forward rectified current at TL (See figure 1)   | $I_{(AV)}$ | 5.0       |      |      |      |      |      |       | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)                 | $I_{FSM}$  | 100       |      |      |      |      |      |       | Amps  |
| Maximum Instantaneous forward voltage (NOTE 2) $I_F=5.0A$  | $V_F$      | 0.55      |      |      | 0.70 |      | 0.85 |       | Volts |
| Maximum Instantaneous reverse current at rated DC blocking voltage (NOTE 2) $T_c=25^\circ C$ / $T_c=100^\circ C$ | $I_R$      | 0.5 / 20  |      |      |      |      |      |       | mA    |
| Typical Junction Capacitance (NOTE 1)  | $C_J$      | 550       |      |      | 400  |      |      |       | P F   |
| Operating temperature range  | $T_J$      | -65to+125 |      |      |      |      |      |       | °C    |
| Storage temperature range  | $T_{Stg}$  | -65to+125 |      |      |      |      |      |       | °C    |

Note:  
 1. Measured at 1MHz and applied reverse voltage of 4 VDC  
 2. Pulse test : 300 us pulse width, 1% duty cycle



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

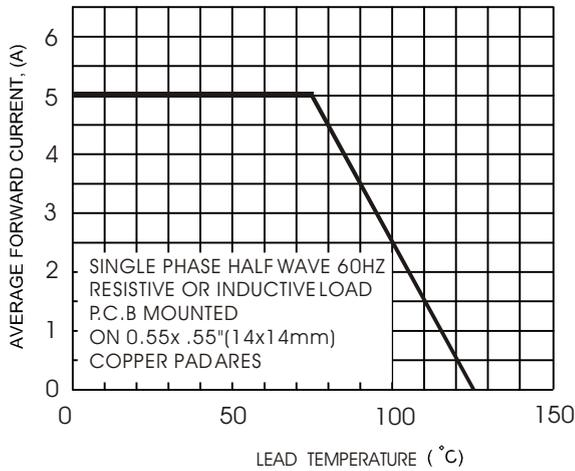


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

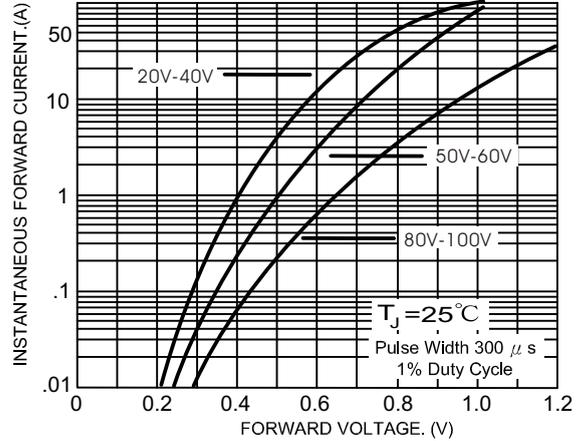


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

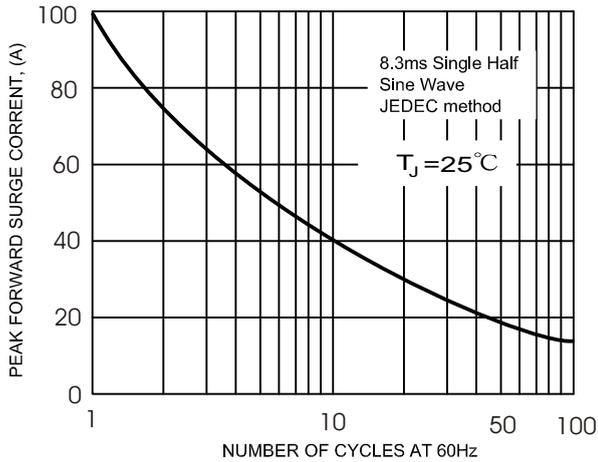


FIG.5- TYPICAL REVERSE CHARACTERISTICS

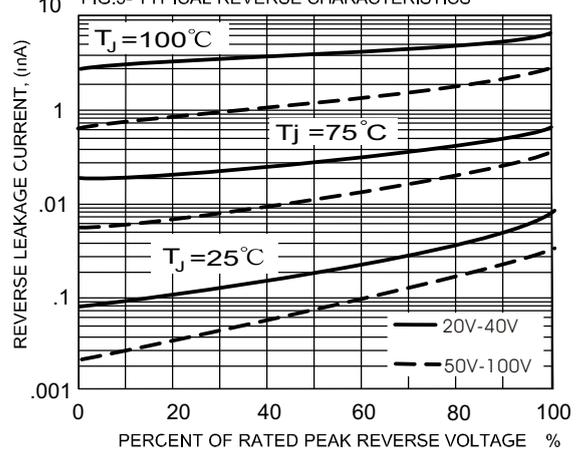
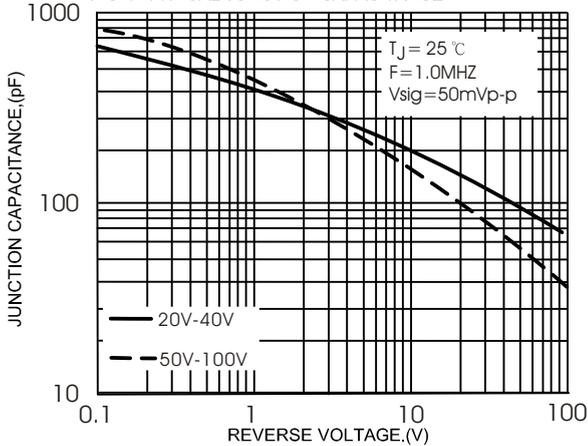


FIG.4- TYPICAL JUNCTION CAPACITANCE





## Disclaimer

DACO Semiconductor reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein.

DACO Semiconductor makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does DACO Semiconductor assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.

Purchasers is responsible for its products and applications using DACO Semiconductor products, including compliance with all laws, regulations and safety requirements or standards, regardless of any support or applications information provided by DACO Semiconductor. "Typical" parameters which may be provided in DACO Semiconductor data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts.

DACO Semiconductor products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of DACO Semiconductor's product can reasonably be expected to result in personal injury, death or severe property or environmental damage. DACO Semiconductor accept no liability for inclusion and/or use of DACO Semiconductor's products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Purchasers buy or use DACO Semiconductor products for any such unintended or unauthorized application, Purchasers shall indemnify and hold DACO Semiconductor and its suppliers and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that DACO Semiconductor was negligent regarding the design or manufacture of the part.

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of DACO Semiconductor Co., Ltd.