R DACO SEMICONDUCTOR CO., LTD.

SRB1020CT THRU SRB1060CT

SCHOTTKY BARRIER RECTIFIERS

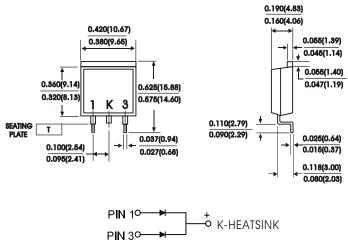
TO-263AB

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- Metal silicon junction
- Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop • High temperature soldering guaranteed:
- 250°C/10 seconds

MECHANICAL DATA

Case : JEDEC TO-263AB molded plastic Teminals : Leads solderable per MIL-STD-750 Method 2026 Polarity : As marked Mounting Postition: Any Mounting Torque 5 in - Ibs.max Weight: 0.08 ounce, 2.24 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 | SRB 1020CT | SRB 1030CT | SRB 1035CT | SRB 1040CT | SRB 1045CT | SRB 1050CT | SRB 1060CT | Units |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| Maximum recurrent peak reverse voltage | V _{RRM} | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 25 | 28 | 32 | 35 | 42 | Volts |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum average forward rectified current at $Tc = 125 \degree C$ | I _(AV) | 10 | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg) | I _{FSM} | 120 | | | | | | Amps | |
| Maximum instantaneous forward voltage (Per leg)(NOTE 2) IF=5.0A | VF | 0.63 0.70 | | | | | | Volts | |
| Maximum instantaneous reverse current at rated DC blocking $Tc = 25 \degree C$ $Tc = 125 \degree C$ voltage (Per leg)(NOTE 2) $Tc = 125 \degree C$ | IR | 0.5 50.0 | | | | | | mA | |
| Typical thermal resistance (Per leg)(NOTE 1) | R _{th} -JC | 3.0 | | | | | | | °C/W |
| Operating temperature range | Тj | -65to+150 | | | | | | °C | |
| Storage temperature range | T _{Stg} | -65to+175 | | | | | | °C | |

NOTES:

(1)Thermal resistance from junction to case

(2)Pulse test: 300 us pulse width, 1% duty cycle

(3)Marking : <u>SR1020CT</u> = <u>SR1020</u> (Without Marking "CT") Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

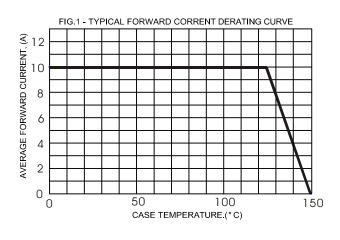
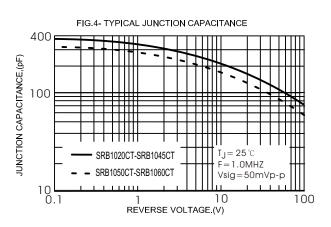


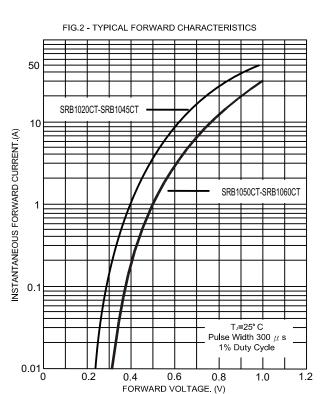
FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 125 8.3ms Single Half Sine Wave JEDEC method PEAK FORWARD SURGE CORRENT, (A) 100 TJ=25 ℃ 75 50 25

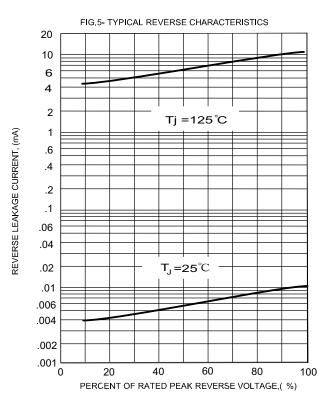
10

NUMBER OF CYCLES AT 60Hz

0







www.dacosemi.com.tw

100

50

DACO SEMICONDUCTOR CO., LTD. SRB1020CT THRU SRB1060CT

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.