R DACO SEMICONDUCTOR CO., LTD.

SRB1520CT THRU SRB1560CT

SCHOTTKY BARRIER RECTIFIERS

TO-263AB

FEATURES:

0.190(4.83) Plastic package Underwriters Laboratory 0.160(4.06) 0.420(10.67) Flammability Classification 94V-0 0.055(1.39) 0.380(9.65) • Dual rectifier construction, positive centertap 0.045(1.14) Metal silicon junction 0.055(1.40) Majority carrier conduction 0.360(9.14) 0.047(1.19) 0.625(15.88) Low power loss, high efficiency 0.320(8.13) 0.575(14.60) 3 Κ High current capability, low forward voltage drop • High temperature soldering guaranteed: П + 0.110(2.79) SEATING PLATE T 250°C/10 seconds 0.090(2.29) . 0.025(0.64) 0.037(0.94) 0.100(2.54) 0.015(0.37) 0.027(0.68) MECHANICAL DATA 0.095(2.41) 0.118(3.00) 0.080(2.03) Case : JEDEC TO-263AB molded plastic Teminals : Leads solderable per MIL-STD-750 PIN 10-Method 2026 K-HEATSINK PIN 30-Polarity : As marked Positive CT 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 1520CT | SRB 1530CT | SRB 1535CT | SRB 1540CT | SRB 1545CT | SRB 1550CT | SRB 1560CT | 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 | VDC | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum average forward rectified current at Tc=125 $^\circ\!\mathrm{C}$ | I _(AV) | 15 | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) (Per leg) | I _{FSM} | 150 | | | | | | | Amps |
| Maximum instantaneous forward voltage (Per leg)(NOTE 2) IF = 7.5A | VF | 0.63 0.75 | | | | | | Volts | |
| Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $Tc = 25 \degree C$ $Tc = 125 \degree C$ | IR | 0.5 50 | | | | | | | mA |
| Typical thermal resistance(Per leg)(NOTE 1) | R _{th} -JC | 3.0 | | | | | | | °C/W |
| Operating temperature range | Tj | -65to+150 | | | | | | | °C |
| Storage temperature range | ^T Stg | -65to+175 | | | | | | | °C |

NOTES:

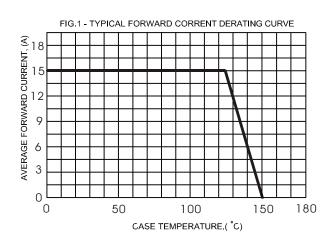
(1)Thermal resistance from junction to case

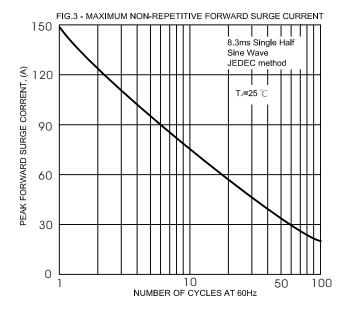
(2)Pulse test: 300 us pulse width, 1% duty cycle

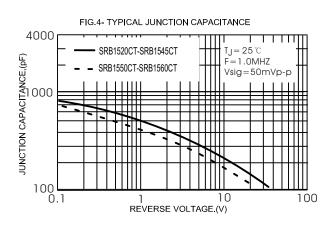
(3)Marking : <u>SR1520CT</u> = <u>SR1520</u> (Without Marking "CT") Symbol Marking

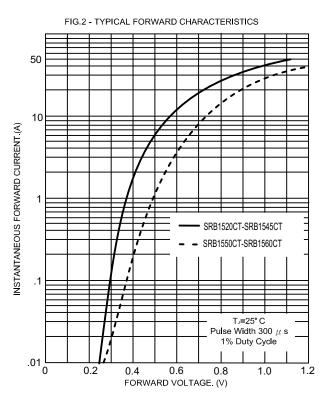


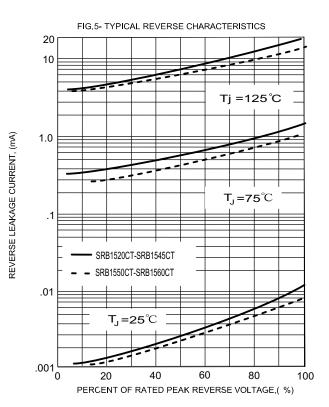
RATINGS AND CHARACTERISTIC CURVES











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