



查询"SD1020D"供应商

DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SD1020D  
THRU  
SD10100D

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER DIODE  
VOLTAGE RANGE - 20 to 100 Volts  
CURRENT - 10 Amperes

### FEATURES

- \* Metal to silicon rectifier majority carrier conduction
- \* Low power loss, High efficiency
- \* High current capability
- \* Low forward voltage drop
- \* High surge capacity
- \* For use in low voltage high frequency inverters, free wheeling, and polarity protection applications

### MECHANICAL DATA

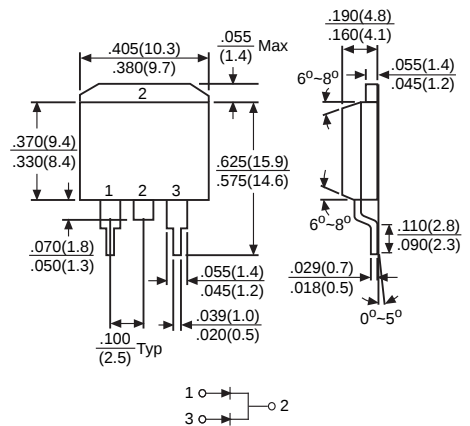
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- \* Mounting position: Any
- \* Weight: 1.7 grams Approx.

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



TO-263(D<sup>2</sup>PAK)



Dimensions in inches and (millimeters)

|                                                                                                   |             | SYMBOL   | SD1020D      | SD1030D | SD1040D | SD1050D | SD1060D | SD1080D | SD10100D | UNITS |
|---------------------------------------------------------------------------------------------------|-------------|----------|--------------|---------|---------|---------|---------|---------|----------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                            |             | VRRM     | 20           | 30      | 40      | 50      | 60      | 80      | 100      | Volts |
| Maximum RMS Voltage                                                                               |             | VRMS     | 14           | 21      | 28      | 35      | 42      | 56      | 70       | Volts |
| Maximum DC Blocking Voltage                                                                       |             | VDC      | 20           | 30      | 40      | 50      | 60      | 80      | 100      | Volts |
| Maximum Average Forward Rectified Current at Tc=100°C                                             |             | IO       | 10           |         |         |         |         |         |          | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) |             | IFSM     | 150          |         |         |         |         |         |          | Amps  |
| Maximum Instantaneous Forward Voltage at 5.0A DC                                                  |             | VF       | 0.65         |         |         | 0.75    |         | 0.85    |          | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage                                           | @TA = 25°C  | IR       | 5.0          |         |         |         |         |         |          | mAmps |
|                                                                                                   | @TA = 100°C |          | 100          |         |         |         |         |         |          |       |
| Typical Thermal Resistance (Note1)                                                                |             | RθJA     | 80           |         |         |         |         |         |          | °C/W  |
| Typical Junction Capacitance (Note 2)                                                             |             | CJ       | 700          |         |         |         |         |         |          | pF    |
| Storage Operating Temperature Range                                                               |             | TJ, TSTG | -55 to + 150 |         |         |         |         |         |          | °C    |

Note : 1. Mounted on PC Board with 14mm<sup>2</sup>(0.013mm thick) copper pad areas.

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

# RATING AND CHARACTERISTIC CURVES (SD1020D THRU SD10100D)

[查询"SD1020D"供应商](#)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

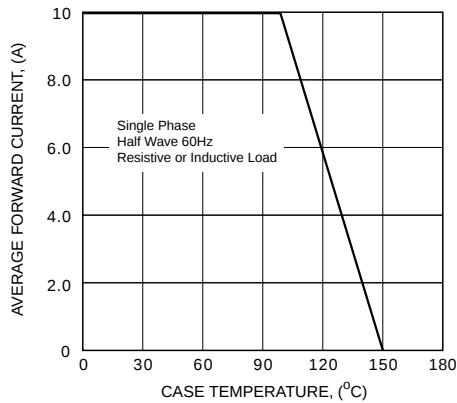


FIG. 2 - TYPICAL REVERSE CHARACTERISTICS

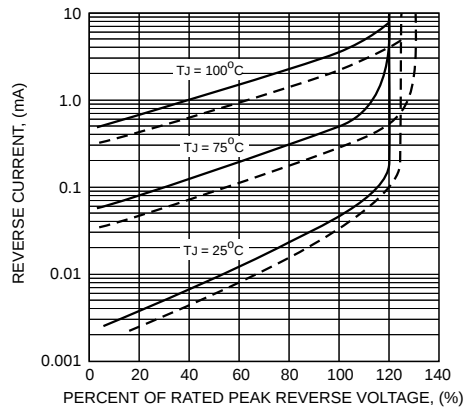


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

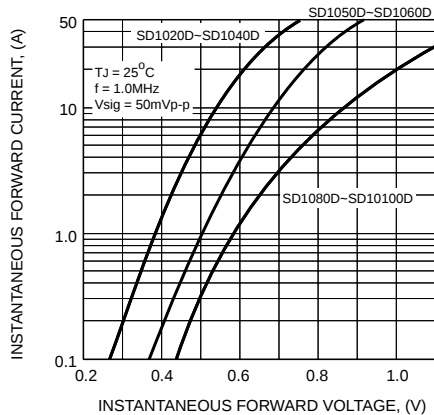


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

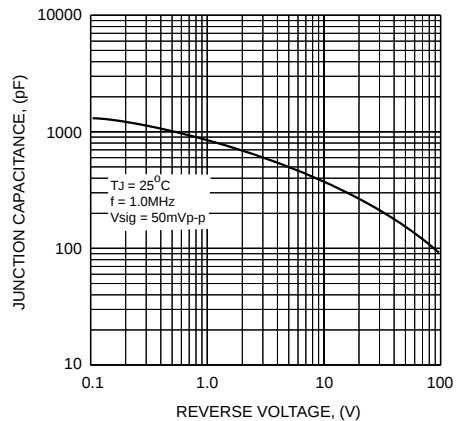


FIG. 6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

