

# R30A...R30M FAST SILICON RECTIFIERS

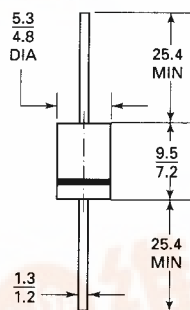
查询R30A供应商

捷多邦，专业PCB打样工厂，24小时加急出货

## FEATURES

- \* Low forward voltage
- \* High current capability
- \* Low leakage current
- \* High surge capability
- \* Low cost

DO - 201AD



## VOLTAGE RANGE

50 to 1000 Volts

## CURRENT

3.0 Amperes

Dimensions in mm

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

|   | R30A         | R30B | R30D | R30G | R30J | R30K | R30M | UNITS            |
|---|--------------|------|------|------|------|------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage  | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V                |
| Maximum RMS Voltage   | 35           | 70   | 140  | 280  | 420  | 560  | 700  | V                |
| Maximum DC Blocking Voltage   | 50           | 100  | 200  | 400  | 600  | 800  | 1000 | V                |
| Maximum Average Forward Rectified Current<br>.375" .9.5mm Lead Length at $T_A = 60^\circ\text{C}$                   | 3.0          |      |      |      |      |      |      | A                |
| Peak Forward Surge Current<br>8.3 ms single half sine-wave  | 150          |      |      |      |      |      |      | A                |
| Maximum Forward Voltage at 3.0A Peak  | 1.3          |      |      |      |      |      |      | V                |
| Maximum Full Load Reverse Current,<br>Full Cycle Average. .375", (9.5mm)<br>Lead Length at $T_A = 55^\circ\text{C}$ | 50           |      |      |      |      |      |      | $\mu\text{A}$    |
| Maximum DC Reverse Current,<br>at Rated DC Blocking Voltage   | 5            |      |      |      |      |      |      | $\mu\text{A}$    |
| Maximum Reverse Recovery Time (Note 1)  | 150          | 150  | 150  | 150  | 250  | 500  | 500  | ns               |
| Typical Junction Capacitance (Note 2)   | 65           |      |      |      |      |      |      | pF               |
| Operating and Storage Temperature Range   | -65 to + 175 |      |      |      |      |      |      | $^\circ\text{C}$ |

### NOTES:

1. Reverse Recovery Test Conditions:  $I_F = .5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_r = .25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts



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Fig. 1—REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

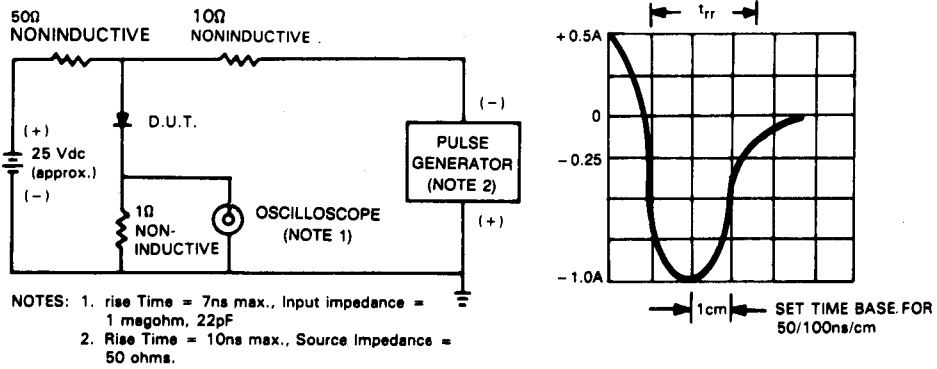


Fig. 2—FORWARD CURRENT DERATING CURVE

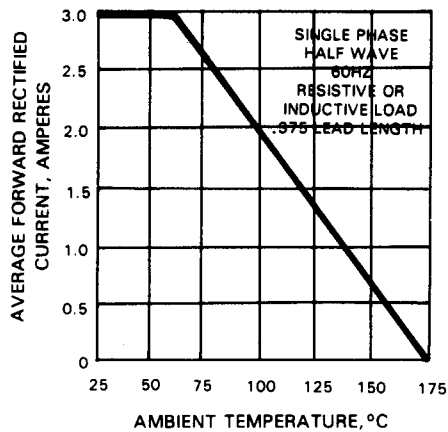
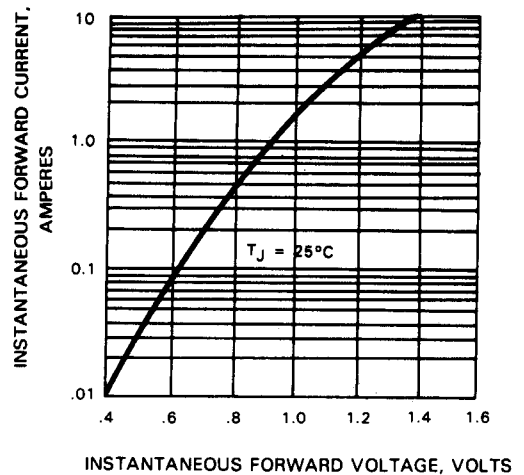


Fig. 3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



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Fig. 4—TYPICAL JUNCTION CAPACITANCE

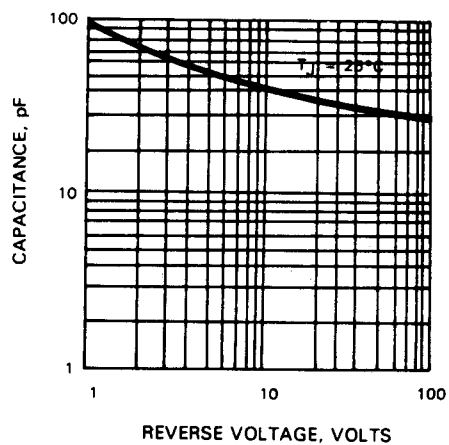


Fig. 5—PEAK FORWARD SURGE CURRENT

