

# R4000F - R5000F HIGH VOLTAGE RECTIFIER DIODES

VOLTAGE RANGE: 4000 - 5000V CURRENT: 0.2 A

#### **Features**

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol
- and similar solvents

#### **Mechanical Data**

Case: DO-15, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

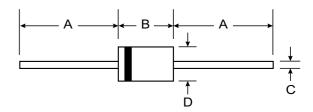
Polarity: Cathode Band

Weight: 0.40 grams (approx.)

Mounting Position: AnyMarking: Type Number







| DO-15                |       |       |  |  |
|----------------------|-------|-------|--|--|
| Dim                  | Min   | Max   |  |  |
| Α                    | 25.40 | _     |  |  |
| В                    | 5.50  | 7.62  |  |  |
| С                    | 0.686 | 0.889 |  |  |
| D                    | 2.60  | 3.60  |  |  |
| All Dimensions in mm |       |       |  |  |

## Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

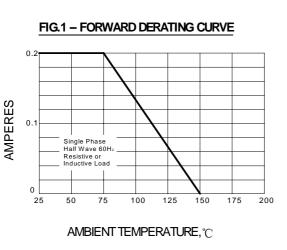
| Characteristic   | Symbol             | R4000F | R5000F       | Unit |
|--|--------------------|--------|--------------|------|
| Maximum recurrent peak reverse voltage   | V <sub>RRM</sub>   | 4000   | 5000         | V    |
| Maximum RMS voltage  | V <sub>RMS</sub>   | 2800   | 3500         | V    |
| Maximum DC blocking voltage  | $V_{DC}$           | 4000   | 5000         | V    |
| Maximum average forw ard rectified current 9.5mm lead length, $@T_A = 75^{\circ}$                          | I <sub>F(AV)</sub> | 0      | 0.2          |      |
| Peak forw ard surge current  8.3ms single half-sine-wave superimposed on rated load @T <sub>J</sub> =125°C | I <sub>FSM</sub>   | 30.0   |              | A    |
| Maximum instantaneous forward voltage  @ 0.2A  | V <sub>F</sub>     | 6      | 6.5          |      |
| Maximum reverse current @T <sub>A</sub> =25℃   | I <sub>R</sub>     |        | 5.0          |      |
| at rated DC blocking voltage @T <sub>A</sub> =100 ℃  Maximum reverse recovery time (Note1)                 | t <sub>rr</sub>    |        | 100.0<br>500 |      |
| Typical junction capacitance (Note2)   | CJ                 | 1      | 15           |      |
| Operating junction temperature range   | TJ                 | - 55   | - 55 + 150   |      |
| Storage temperature range  | T <sub>STG</sub>   | - 55   | - 55 + 150   |      |

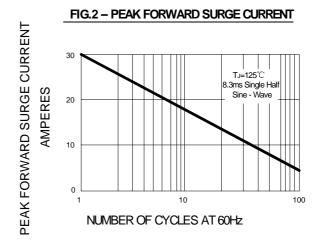
NOTE: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

<sup>2.</sup> Measured at 1.0MH  $_{\rm Z}$  and applied reverse voltage of 4.0V DC.

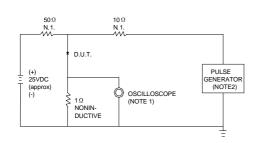


AVERAGE FORWARD RECTIFIED CURRENT

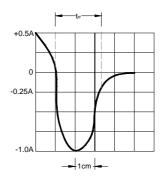




### FIG.3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1.RISE TIME = 7ns MAX.INPUT IMPEDANCE =1 $M_{\Omega}$ . 22pF. 2.RISE TIME =10ns MAX.SOURCE IMPEDANCE=50  $\Omega$ .



SET TIME BASE FOR 50/100 ns/cm

单击下面可查看定价,库存,交付和生命周期等信息

>>SUNMATE(森美特)