

## R2000F FAST RECOVERY RECTIFIER

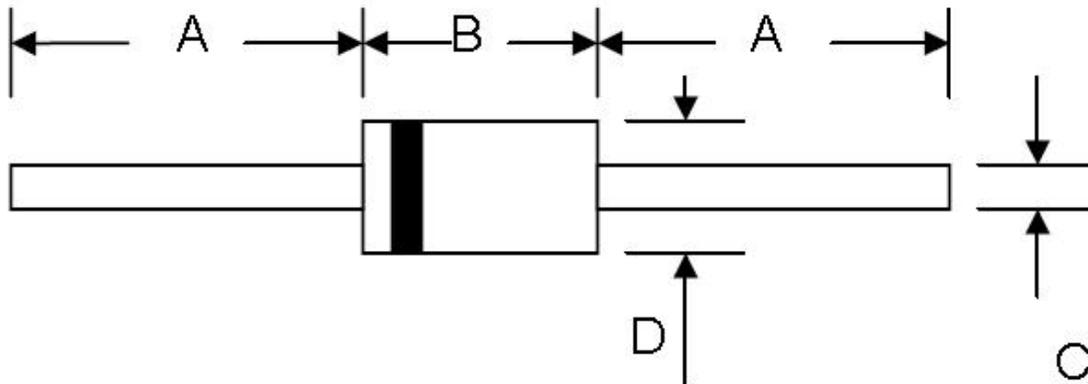
### Features:

- Fast switching
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Mechanical data:

- Case: Molded Plastic
- Lead: MIL-STD-202E method 208C guaranteed
- Epoxy: Device has flammability classification 94-O
- Polarity: Cathode Band
- Weight: 0.35 grams(Approx)

### Mechanical Dimensions: In mm/Inches



DO-41				
Dim	Min	Max	Min	Max
<b>A</b>	25.4	—	1.000	—
<b>B</b>	4.06	5.21	0.159	0.205
<b>C</b>	0.71	0.864	0.028	0.034
<b>D</b>	2.00	2.72	0.079	0.107
	In mm		In inch	

### DO-41

**Marking Diagram:**

Where XXXXX is YYWWL



R2000F = Part Name  
 SSG = SSG  
 YY = Year  
 WW = Week  
 L = Lot Number

**Cautions:** Molding resin  
 Epoxy resin UL:94V-0

**Ordering Information**

Device	Package	Shipping
R2000F	DO-41 (Pb-Free)	5000pcs / tape

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

**Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$  unless otherwise specified**

Characteristic	Symbol	R2000F	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	2000	V
RMS Reverse Voltage	$V_{R(RMS)}$	1400	V
Average Rectified Output Current @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	0.2	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30	A
Forward Voltage @ $I_F = 0.2\text{A}$	$V_{FM}$	4.0	V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 55^\circ\text{C}$	$I_{RM}$	5.0 100	$\mu\text{A}$
Reverse recovery time (Note)	$t_{rr}$	500	ns
Operating and Storage Temperature Range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

Note: 1. Reverse recovery condition  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

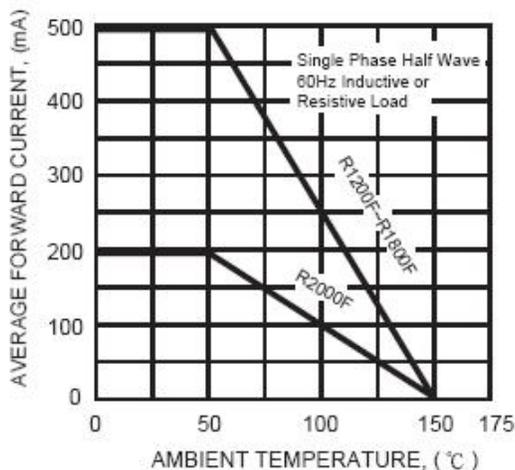


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

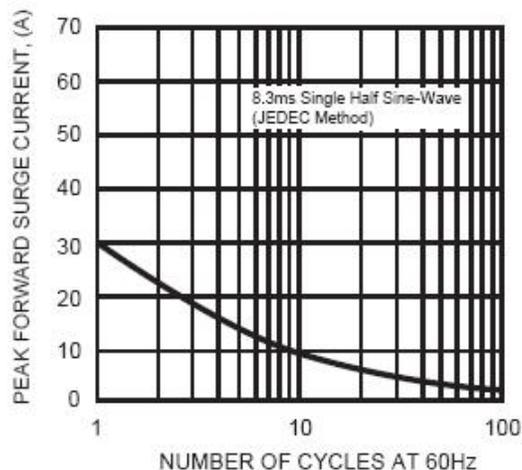
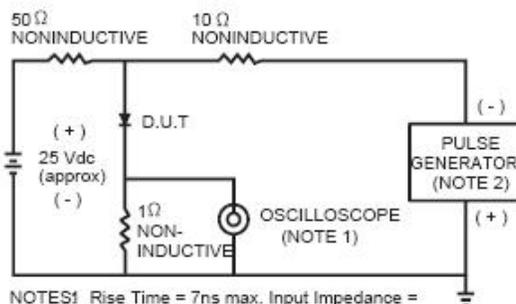
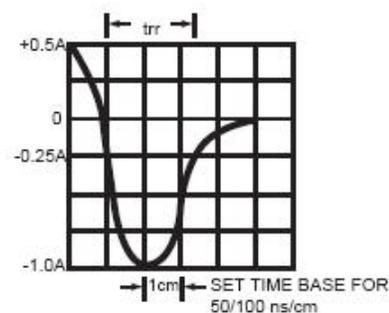


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.  
2. Rise Time = 10ns max. Source Impedance = 50 ohms.



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