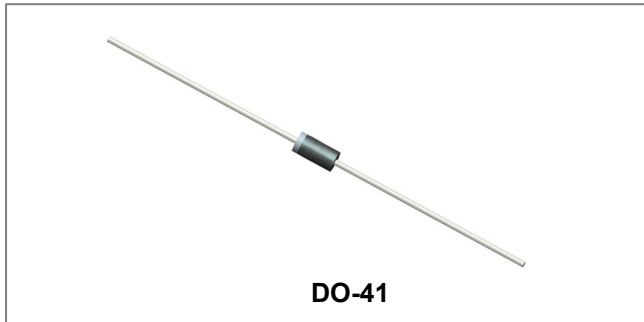


## R2000F FAST RECOVERY RECTIFIER



### 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

### Circuit Diagram



### Mechanical Data

- Case: DO-41 molded plastic body
- Lead: MIL-STD-202E method 208C guaranteed
- Epoxy: Device has flammability classification 94-0
- Polarity: Cathode Band
- Weight: 0.35 grams(Approx)

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

Characteristic	Symbol	R2000F	Units
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 (Note1)	$t_{rr}$	500	ns
Operating and Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}\text{C}$

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

**Ratings and Characteristics Curves**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

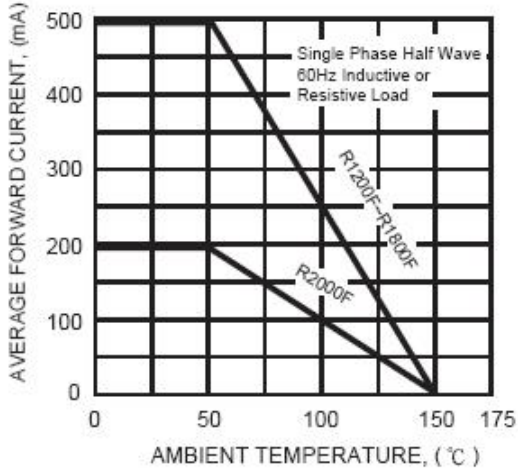


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

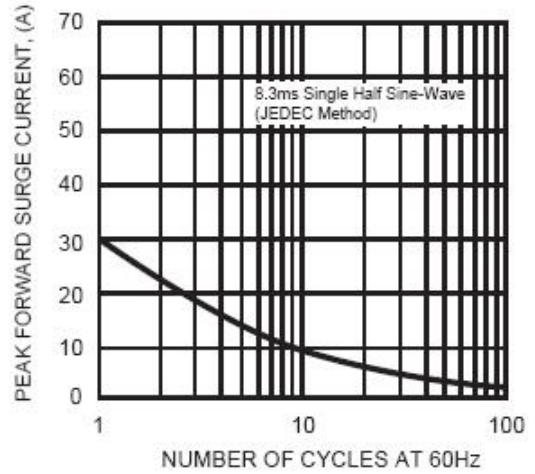
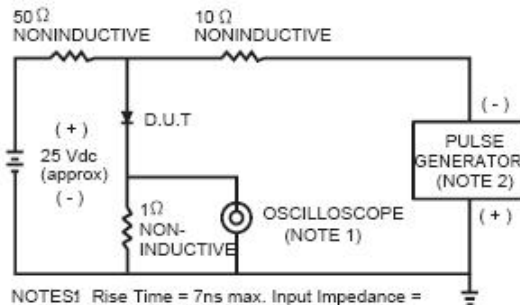
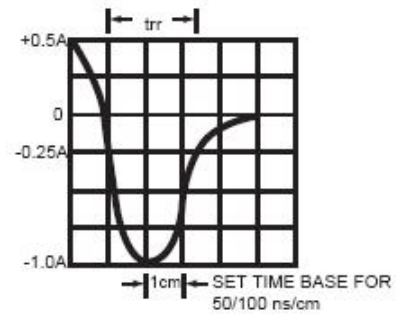
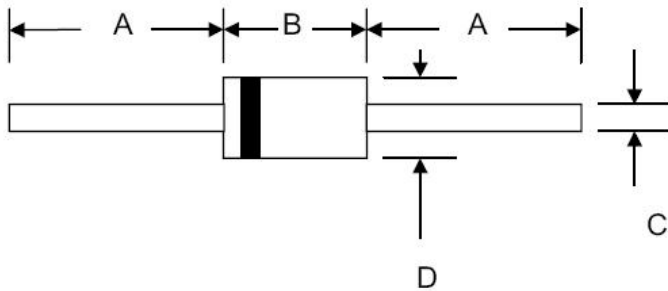


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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



**Mechanical Dimensions DO-41**


SYMBOL	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.4	-	1.000	-
B	4.06	5.21	0.160	0.205
C	0.71	0.864	0.028	0.034
D	2.00	2.72	0.079	0.107

**Ordering Information**

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

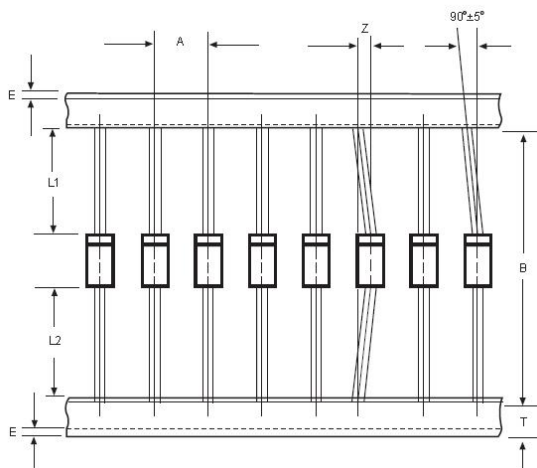
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**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

**Carrier Tape Specification DO-41**


SYMBOL	Millimeters	
	Min.	Max.
A	4.50	5.50
B	50.9	53.9
Z	-	1.20
T	5.60	6.40
E	-	0.80
IL1-L2I	-	1.0

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