

# R1200F THRU R2000F

## HIGH VOLTAGE FAST RECOVERY RECTIFIER

**REVERSE VOLTAGE:** 1200 to 2000 VOLTS  
**FORWARD CURRENT:** 0.2 to 0.5 AMPERE

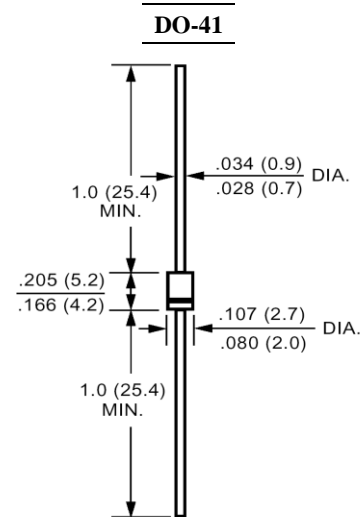
<http://www.njzrg.com>

### FEATURES

- Fast switching
- Low leakage
- Low forward voltage drop
- High current capability
- High current surge
- High reliability

### MECHANICAL DATA

Case: Molded plastic, DO-41  
Epoxy: UL 94V-O rate flame retardant  
Terminals: Axial leads, solderable per MIL-STD-202, method 208 guaranteed  
Polarity: Band denotes cathode  
Mounting position: Any  
Weight: 0.013ounce, 0.3gram



Dimensions in inches and (millimeters)

### 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%.

	Symbols	R1200F	R1500F	R1800F	R2000F	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1200	1500	1800	2000	Volts
Maximum RMS Voltage	$V_{RMS}$	840	1050	1260	1400	Volts
Maximum DC Blocking Voltage	$V_{DC}$	1200	1500	1800	2000	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) Lead Length at $T_A=50$	$I_{(AV)}$	0.5			0.2	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30				Amp
Maximum Forward Voltage at 0.5/0.2A	$V_F$	2.5			4	Volts
Maximum Reverse Current at Rated DC Blocking Voltage $T_A=25$	$I_R$	5.0				uAmp
Maximum Full Load Reverse Current Average, Full Cycle .375", (9.5mm) lead length at $T_L = 55$		100				uAmp
Maximum Reverse Recovery Time (Note 1)	$T_{RR}$	500				nS
Operating and Storage Temperature Range	$T_J, T_{stg}$	-55 to +150				

### NOTES:

1- Reverse Recovery Test Conditions :  $I_F=0.5A$  ,  $I_R=1A$  ,  $I_{RR}=0.25A$ .

# R1200F THRU R2000F

## HIGH VOLTAGE FAST RECOVERY RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES

<http://www.njzrg.com>

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

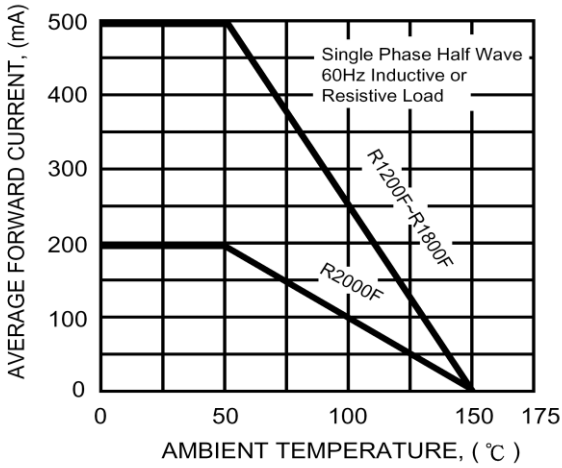


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

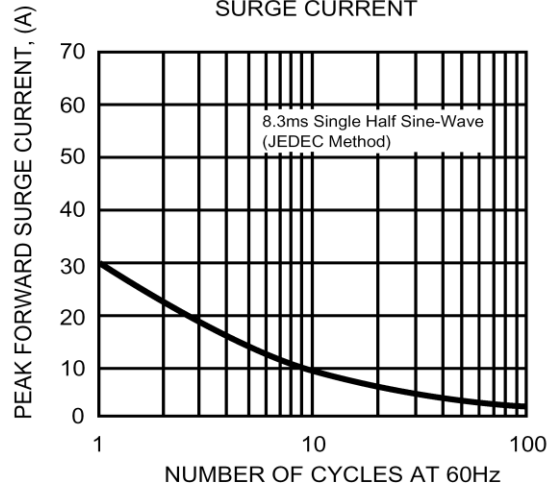
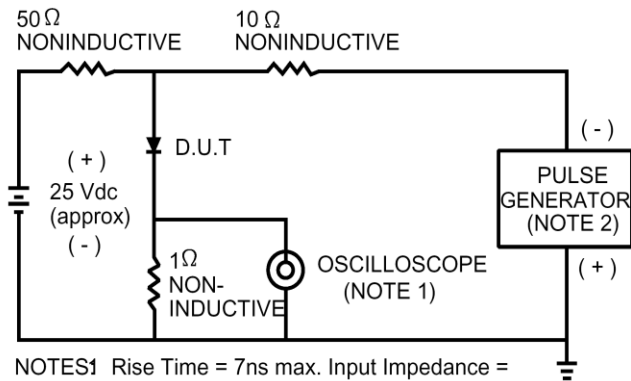


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

