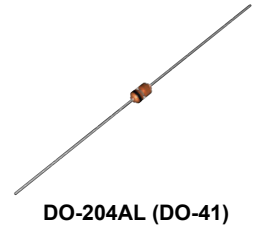


# R1200FG THRU R2000FG

High Voltage Glass Passivated Fast Recovery Rectifiers  
 Reverse Voltage 1200 to 2000V Forward Current 0.2 to 0.5A

## Features

- Fast switching
- Low leakage
- High current capability
- High surge capability
- High reliability



## Mechanical Data

- Case: Molded plastic DO-204AL (DO-41)
- Epoxy: Device has UL flammability classification 94V-O
- Lead: MIL-STD-202E method 208C guaranteed
- Mounting Position: Any
- Weight: 0.012 ounce, 0.335 gram

## Absolute 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%.

Parameter	Symbol	R1200FG	R1500FG	R1800FG	R2000FG	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1200	1500	1800	2000	V
Maximum RMS Voltage	$V_{RMS}$	840	1050	1260	1400	V
Maximum DC Blocking Voltage	$V_{DC}$	1200	1500	1800	2000	V
Maximum Average Forward Rectified Current at $T_A=50^\circ\text{C}$	$I_{F(AV)}$	500			200	mA
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30.0				A
Maximum Instantaneous Forward Voltage at 0.5/0.2A DC	$V_F$	2.5			4.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_A=25^\circ\text{C}$	$I_R$	5.0				uA
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5mm) Lead Length at $T_A=55^\circ\text{C}$	$I_{R(AV)}$	100				uA
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$	500				nS
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150				°C

Note:

(1) Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$ .

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## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

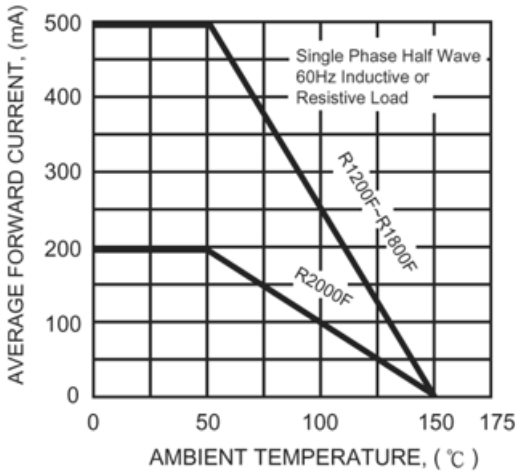


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

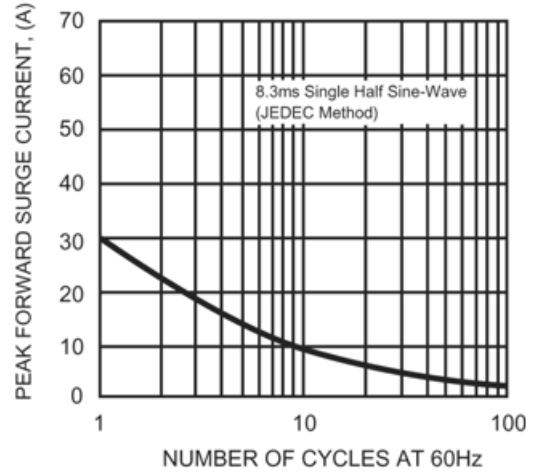
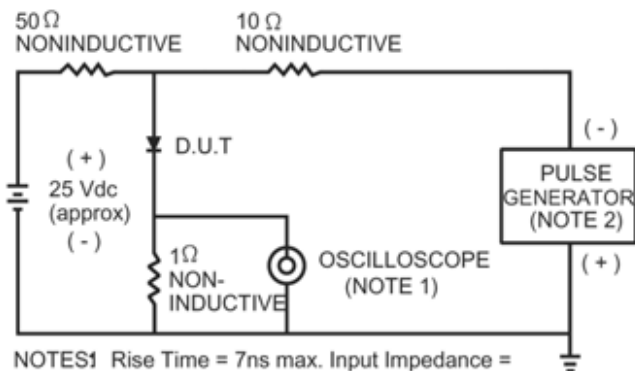
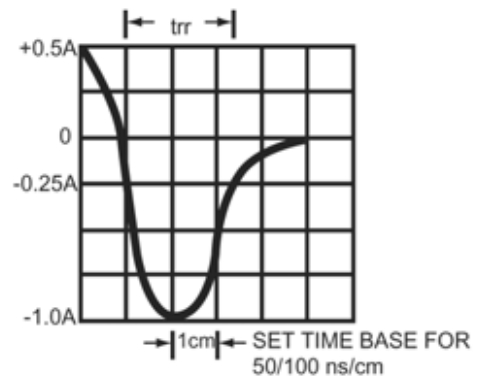


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



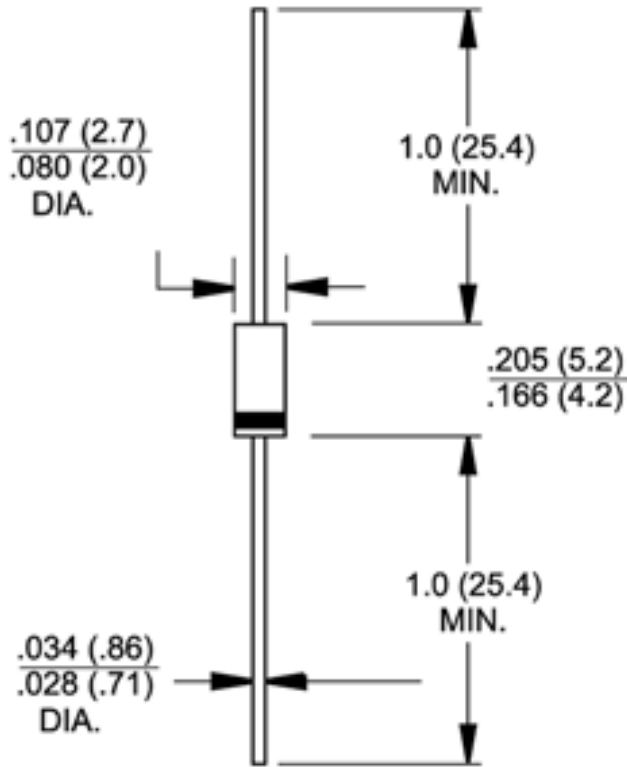
NOTES1 Rise Time = 7ns max. Input Impedance = 1 megohm. 22 pF.  
 2. Rise Time = 10ns max. Source Impedance = 50 ohms.



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## Package Outline Dimensions DO-204AL (DO-41)



**Dimensions in inches and (millimeters)**