

R1200F THRU R2000F

HIGH VOLTAGE FAST RECOVERY RECTIFIER

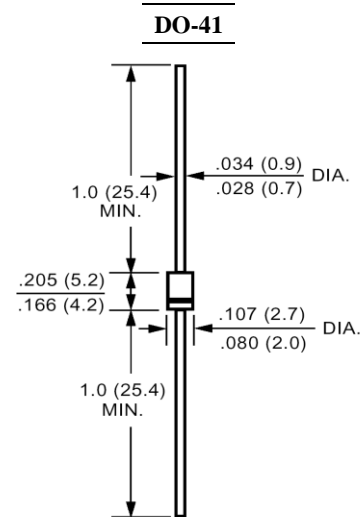
REVERSE VOLTAGE: 1200 to 2000 VOLTS
FORWARD CURRENT: 0.2 to 0.5 AMPERE

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}	300				nS
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150				

NOTES:

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

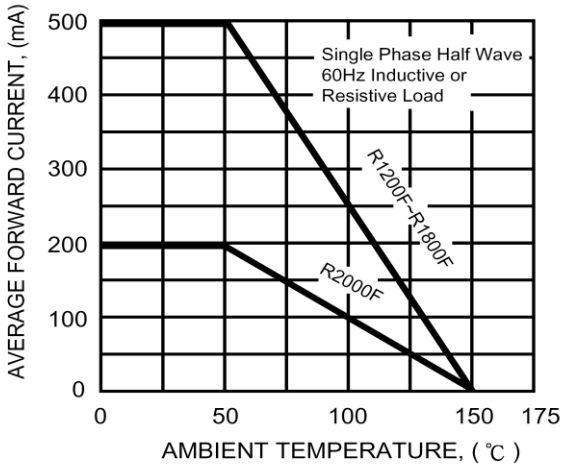


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

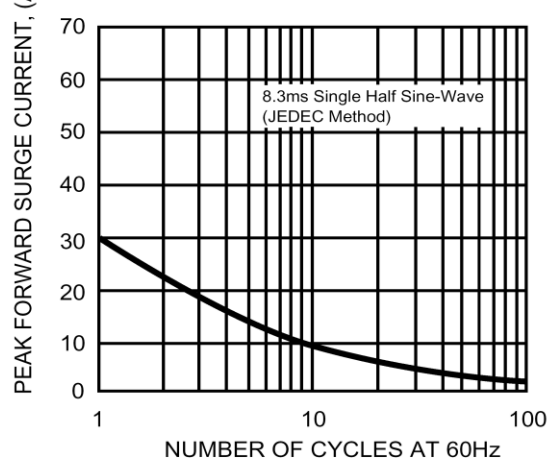
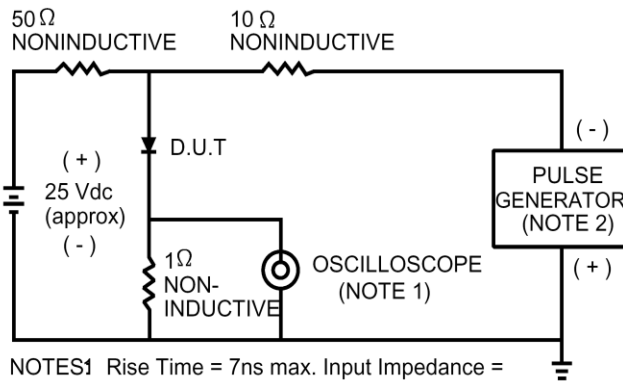


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

