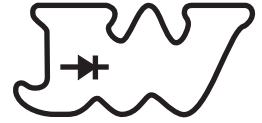


R1200F THRU R2500F



HIGH VOLTAGE FAST RECOVERY RECTIFIERS



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.34 grams

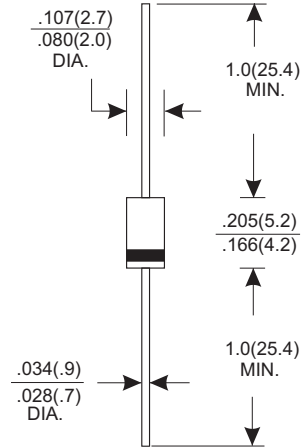
VOLTAGE RANGE

1200 to 2500 Volts

CURRENT

500 & 200 m Ampere

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unieess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | R1200F | R1500F | R1600F | R1800F | R2000F | R2500F | UNITS |
|---|------------|--------|--------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | 1200 | 1500 | 1600 | 1800 | 2000 | 2500 | V |
| Maximum RMS Voltage | 840 | 1050 | 1120 | 1260 | 1400 | 1750 | V |
| Maximum DC Blocking Voltage | 1200 | 1500 | 1600 | 1800 | 2000 | 2500 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=50°C | 500 | | | | 200 | | mA |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 30 | | | | | | A |
| Maximum Instantaneous Forward Voltage at 0.5A/0.2A D.C. | 2.0 | | | | 3.0 | | V |
| Maximum DC Reverse Current Ta=25°C | 5.0 | | | | | | μA |
| at Rated DC Blocking Voltage Ta=100°C | 100 | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | 500 | | | | | | nS |
| Typical Junction Capacitance (Note 2) | 40 | | | | | | pF |
| Operating and Storage Temperature Range Tj, Tstg | -65 — +175 | | | | | | °C |

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (R1200F THRU R2500F)

FIG.1 - TYPICAL REVERSE CHARACTERISTICS

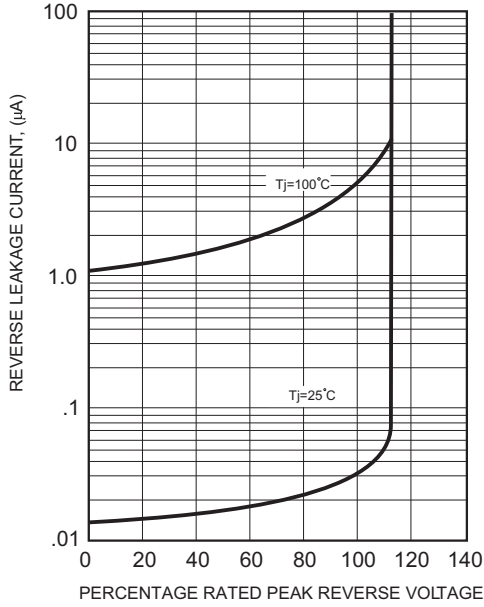


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

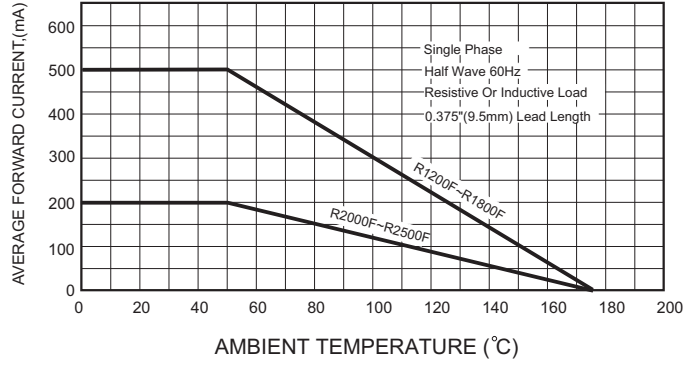


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

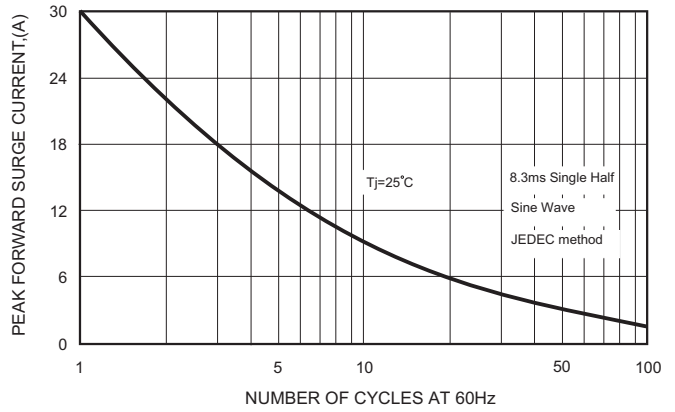
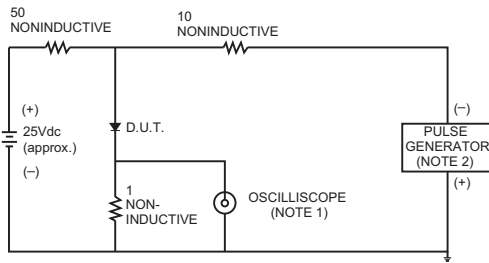


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

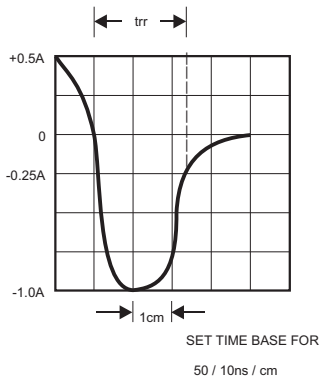


FIG.5-TYPICAL JUNCTION CAPACITANCE

