

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

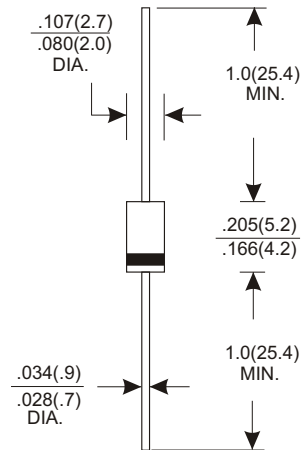
VOLTAGE RANGE

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 at Rated DC Blocking Voltage	5.0						μA
	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:

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

RATING AND CHARACTERISTIC CURVES (R1200F THRU R2500F)

FIG.1 - TYPICAL REVERSE CHARACTERISTICS

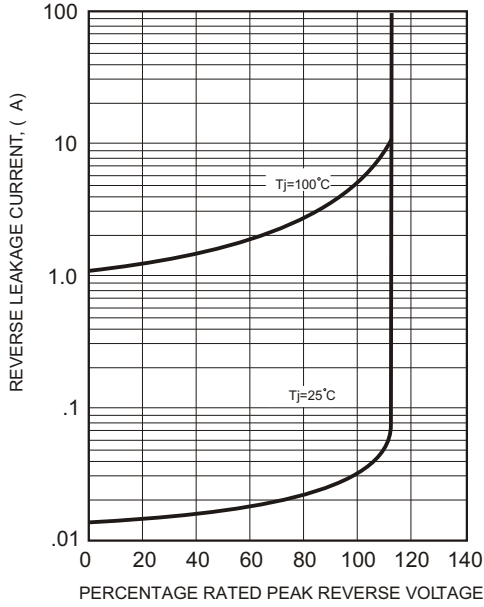


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

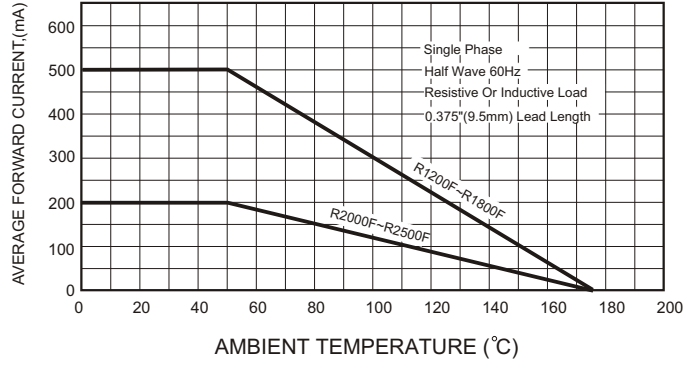


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

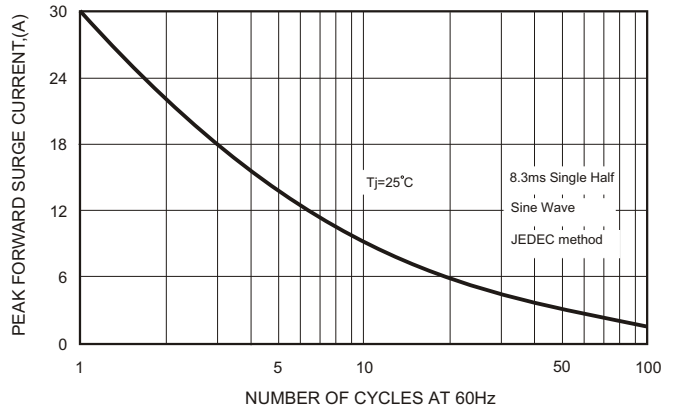
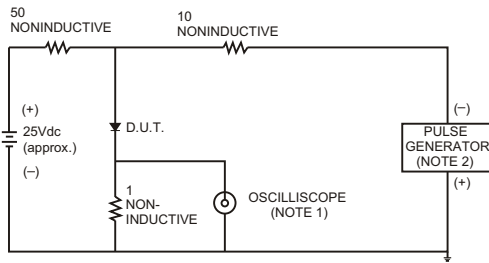


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

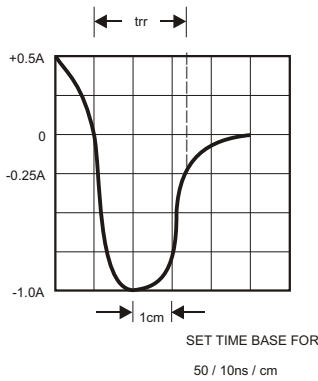


FIG.5-TYPICAL JUNCTION CAPACITANCE

