



R1200F THRU R2000F

HIGH VOLTAGE FSAT RECOVERY RECTIFIER

VOLTAGE RANGE
1200 To 2000 Volts
CURRENT
1.0 Ampere

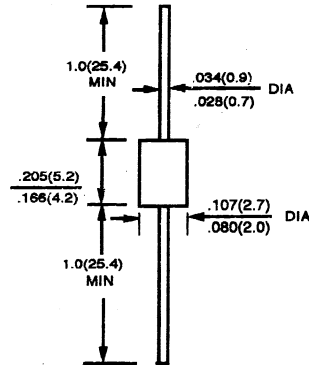
FEATURES

- * Fast swiching
- * low leakage
- * High current capability
- * High reliability
- * High surge capability

MECHANICAL DATA

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

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SYMBOLS	R1200F	R1500F	R1800F	R2000F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200	1500	1800	2000	V
Maximum RMS Volts	V_{RMS}	840	1050	1260	1400	V
Maximum D. C Blocking Voltage	V_{DC}	1200	1500	1800	2000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ C$	$I_{F(AV)}$	0.5			0.2	A
Peak Forward Surge Current, 8.3 ms single half sine - wave superimposed on rated load (JEDEC method)	I_{FSM}	25				A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.6		2.0		V
Maximum DC Reverse current at Rated DC Blocking Voltage $T_A = 25^\circ C$	I_R	10.0				μA
Maximum Full Load Reverse Current Average, full Cycle .375", (9.5mm) lead length at $T_L = 55^\circ C$		100				μA
Maximum Reverse Recovery Time (Note)	T_{RR}	500				ns
Operation and Storage Temperate Range	T_J/T_{STG}	- 65 to + 150				$^\circ C$

NOTE: (1) Test Conditions: $I_F = 0.5A$, $I_R = - 1.0A$, $I_{RR} = 0.25A$

RATINGS AND CHARACTERISTIC CURVES

R1200F THRU R2000F

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

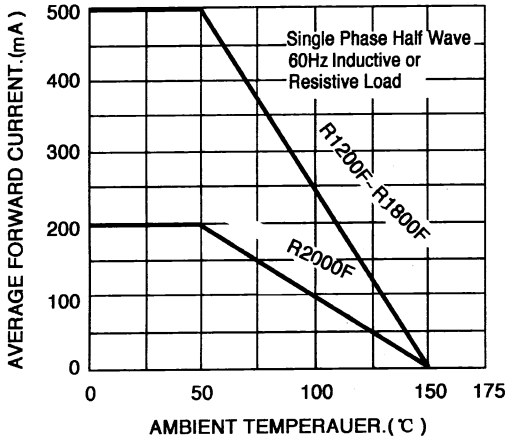


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

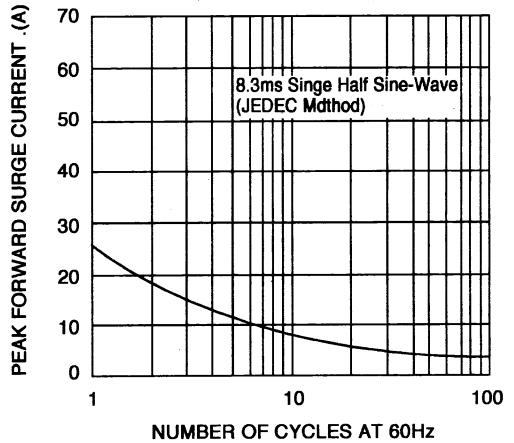
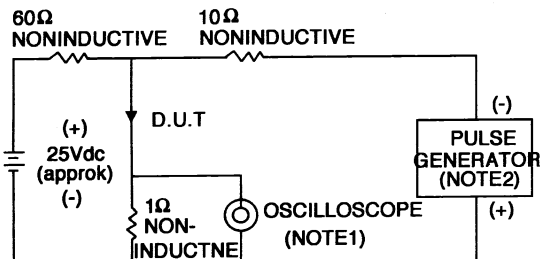


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE 31 R_{tae} Time = 7ns max. Input Impedance = 1megohm, 22pF
 2. R_{tee} Time 10ns max. Source Impedance = 50 ohms

