



R1200F THRU R2000F

HIGH VOLTAGE FSAT RECOVERY RECTIFIER

VOLTAGE RANGE
1200 To 2000 Volts
CURRENT
1.0 Ampere

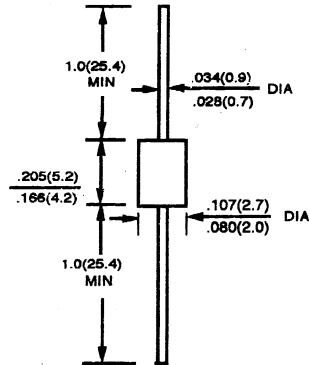
FEATURES

- * 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°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°C	I _R	10.0				μA
Maximum Full Load Reverse Current Average, full Cycle 375", (9.5mm) lead length at T _L = 55°C		100				μA
Maximum Reverse Recovery Time (Note)	T _{RR}	500				ns
Operation and Storage Temperate Range	T _J /T _{STG}	– 65 to + 150				°C

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

RATINGS AND CHARACTERISTIC CURVES

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FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

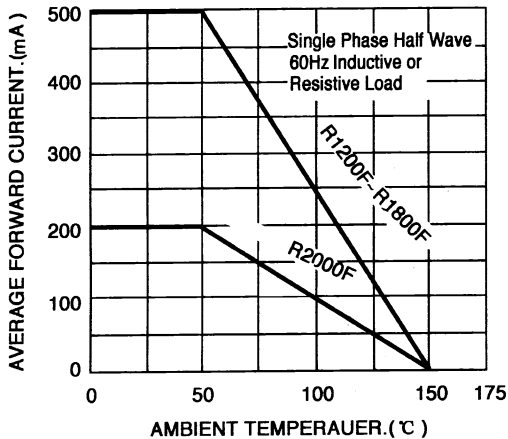


FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

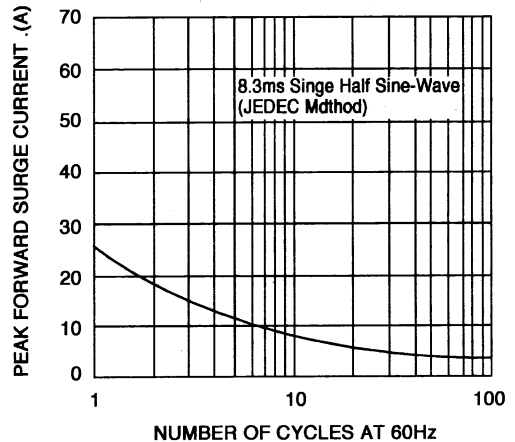
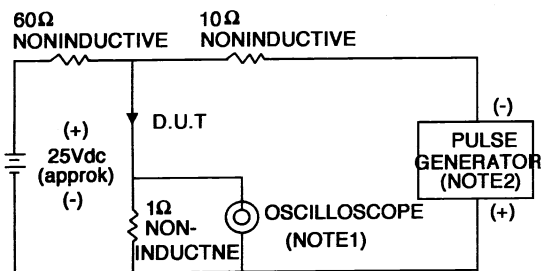


FIG. 3 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTE31 R_{tae} Time=7ns max. Input Impedance=1megohm. 22pF
 2. R_{tee} Time 10ns max. Source Impedance=50 ohms

