



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

R1200F
THRU
R3000F

TECHNICAL SPECIFICATIONS OF HIGH VOLTAGE FAST RECOVERY RECTIFIER

VOLTAGE RANGE - 1200 to 3000 Volts

CURRENT - 0.2 to 0.5 Ampere

FEATURES

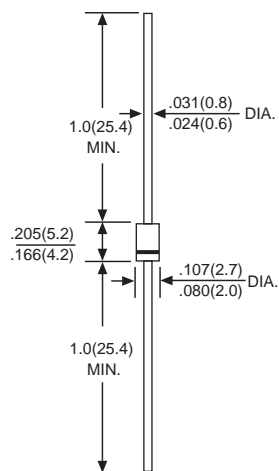
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.35 gram



DO-41



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%.

	SYMBOL	R1200F	R1500F	R1800F	R2000F	R2500F	R3000F	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	1200	1500	1800	2000	2500	3000	Volts
Maximum RMS Volts	V _{RMS}	840	1050	1260	1400	1750	2100	Volts
Maximum DC Blocking Voltage	V _{DC}	1200	1500	1800	2000	2500	3000	Volts
Maximum Average Forward Rectified Current at T _A = 50°C	I _O	500			200			mAmps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30						Amps
Maximum Instantaneous Forward Voltage at 0.5A/0.2A DC	V _F	2.5		4.0		5.0		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T _A = 25°C	I _R	5.0						uAmps
Maximum Full Load Reverse Current Average, Full Cycle .375" (9.5mm) lead length at T _L = 55°C		100						uAmps
Maximum Reverse Recovery Time (Note)	t _{rr}	500						nSec
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to + 175						°C

NOTES : Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A

RATING AND CHARACTERISTIC CURVES (R1200F THRU R3000F)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

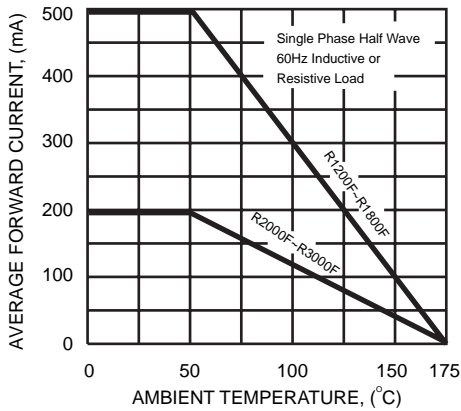


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

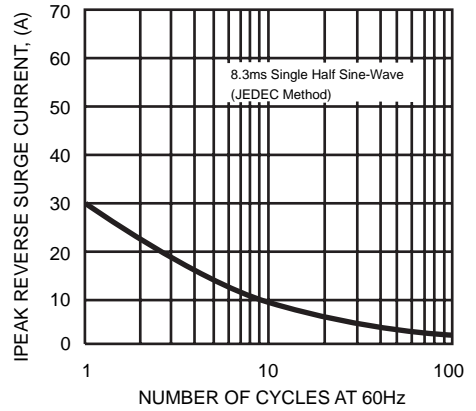
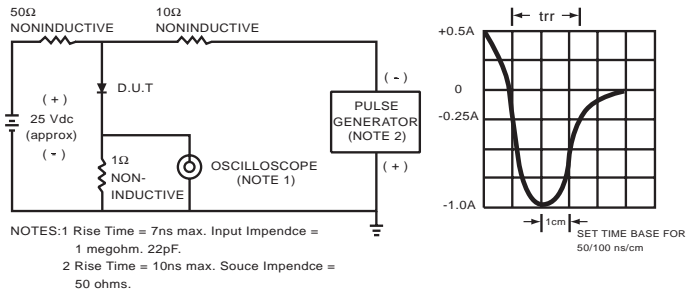


FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



Disclaimer

Any Customer or user of this document or products described herein in such applications shall assume all risks of such use and will agree to hold *DC COMPONENTS* harmless against all damages.

DC COMPONENTS disclaims any and all liability arising out of the application or use of any product, including consequential or incidental damages. Statements regarding the suitability of products for certain types of applications are based on *DC COMPONENTS*'s knowledge of typical requirements that are often placed on *DC COMPONENTS* products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application.

DC COMPONENTS reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to this document and any product described herein, and disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify *DC COMPONENTS*'s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Unless otherwise in writing, *DC COMPONENTS* products are intended for use as general electronic components in standard applications (eg: Consumer electronic, Computer equipment, Office equipment, etc.), and not recommended for use in a high specific application where a failure or malfunction of the device could result in human injury or death (eg: Aerospace equipment, Submarine cables, Combustion equipment, Safety devices, Life support systems, etc.)

Customers using or selling *DC COMPONENTS* products not expressly indicated for use in such applications do so at their own risk. If customer intended to use *DC COMPONENTS* standard quality grade devices for applications not envisioned by *DC COMPONENTS*, please contact our sales representatives in advance.



DC COMPONENTS CO., LTD.