

**TECHNICAL DATA**  
**DATA SHEET 6220, REV. -**

**HERMETIC ULTRAFAST RECTIFIER**  
**SMD-0.5 Package, 600V**

**DESCRIPTION:** A 600 VOLT, 7 AMP, 60 NANOSECOND RECTIFIER IN A HERMETIC SMD-0.5 (LCC-5) PACKAGE.

✓ Add Suffix "S" to the Part Number for S-100 Screening

**MAXIMUM RATINGS**

ALL RATINGS ARE AT  $T_A = 25\text{ C}$  UNLESS OTHERWISE SPECIFIED

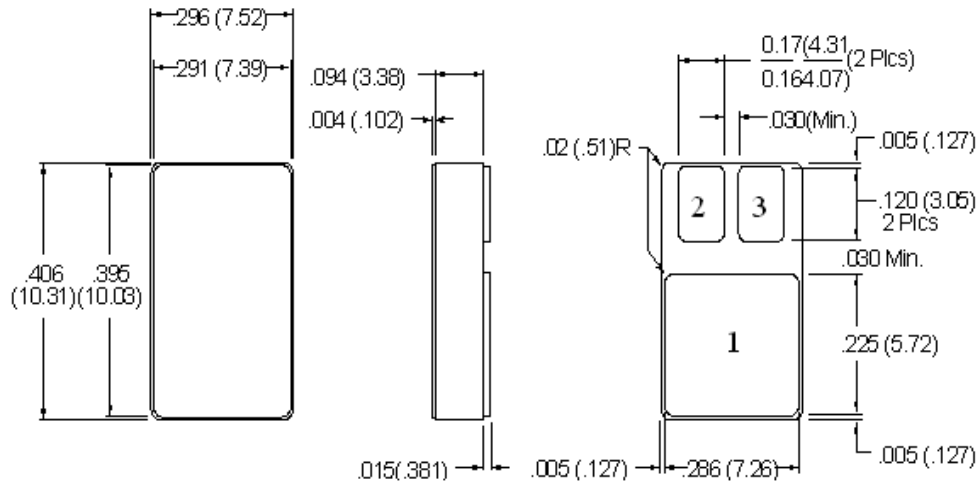
RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	600	Volts
MAXIMUM DC OUTPUT CURRENT ( $T_C = 100\text{ }^\circ\text{C}$ )	$I_o$	8	Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3\text{ msec}$	$I_{FSM}$	80	Amps
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	3.2	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_{op/stg}$	-65 to +175	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 25^\circ$ (PER LEG) ( $I_f = 8\text{ Amps}$ )	$V_F$	1.5	Volts
MAXIMUM FORWARD VOLTAGE DROP @ $T_A = 125^\circ$ (PER LEG) ( $I_f = 8\text{ Amps}$ )	$V_F$	1.4	Volts
MAXIMUM REVERSE CURRENT $I_r$ @ PIV (PER LEG) @ $T_A = 25^\circ\text{C}$	$I_R$	10	$\mu\text{A}$
MAXIMUM REVERSE CURRENT $I_r$ @ PIV (PER LEG) @ $T_A = 125^\circ\text{C}$	$I_R$	1000	$\mu\text{A}$
MAXIMUM REVERSE RECOVERY TIME ( $I_f = 0.5\text{A}$ , $I_r = 1.0\text{A}$ , $I_{rr} = 0.25\text{A}$ )	$t_{rr}$	60	nsec

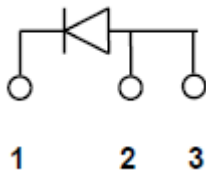
**TECHNICAL DATA**  
**DATA SHEET 6220, Preliminary**

**MECHANICAL DIMENSIONS: In Inches / mm**



**SMD-0.5**

**SINGLE**



**PINOUT TABLE**

DEVICE TYPE	PIN 1	PIN 2	PIN 3
SINGLE RECTIFIER	CATHODE	ANODE	ANODE

**DISCLAIMER:**

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.