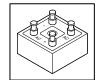
TECHNICAL DATA DATA SHEET 4306, REV. B



## SINGLE PHASE FULL WAVE BRIDGE RECTIFIER ASSEMBLY

DESCRIPTION: A 10A, 5000 NANOSECOND SINGLE PHASE BRIDGE RECTIFIER ASSEMBLY. AVAILABLE IN 200V, 400V, 600V, 800V AND 1000V.

**FEATURE**: A Dielectric Withstanding Voltage test will be performed with the metal case of the assembly connected to ground and all four terminals connected to the high potential side of a DC power supply or scope display test. Voltage applied shall be 2800 Vdc and held for 10 seconds.

MAX. RATINGS / ELECTRICAL CHARACTERISTICS All ratings are at  $T_A = 25^{\circ}$ C unless otherwise specified.

WAX. RATINGS / ELECTRICAL CHARACTERISTICS			All ratings are at $T_A = 25$ C unless otherwise specified.			
RATING	CONDITIONS	MIN	TYP	MAX	UNIT	
Peak Inverse Voltage (PIV)	S469-01	-	-	200	Vdc	
	S469-02			400		
	S469-03			600		
	S469-04			800		
	S469-05			1000		
Average DC Output Current (T <sub>C</sub> = Case Temp) (I <sub>o</sub> )	$T_C = 55$ $^{\circ}C$	-	-	10	Amps	
	T <sub>C</sub> = 100 °C			6.0		
	T <sub>C</sub> = 125 °C			3.0		
Peak Single Cycle Surge Current (I <sub>FSM</sub> ) Rated at T <sub>A</sub> = 55°C	t <sub>p</sub> = 8.3 ms Single Half Cycle Sine Wave, Superimposed On Rated Load	1	-	100	Amps(pk)	
Maximum Forward Voltage Per Leg (V <sub>f</sub> )	I <sub>f</sub> = 15.7 Adc (300 μsec pulse, duty cycle < 2%)	-	-	1.35	Volts	
Maximum Instantaneous Reverse Current At Rated (PIV)	T <sub>A</sub> = 25° C	-	-	2.0	μAmps	
	T <sub>A</sub> = 100° C			125		
Reverse Recovery Time (t <sub>rr</sub> )	$I_f = 0.5A, I_r = 1.0A,$ $I_{rr} = 0.25A$	-	-	5000	nsec	
Thermal response	$R_{ heta JC}$	-	-	1.5	°C/W	
Maximum operating and storage temperature range	$T_{J,stg}$	-55		+150	°C	

<sup>• 221</sup> West Industry Court ■ Deer Park, NY 11729-4681 ■ Phone (631) 586 7600 Fax (631) 242 9798 •

<sup>•</sup> World Wide Web - http://www.sensitron.com • E-Mail Address - sales@sensitron.com •

**SENSITRON** 

## TECHNICAL DATA DATA SHEET 4306, REV. B

## **MECHANICAL DIMENSIONS: In Inches / mm**

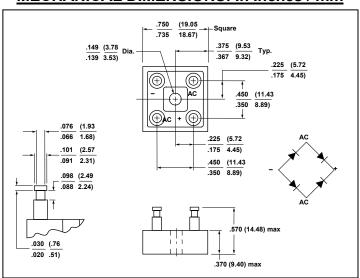


Fig. 469

Note: Case finish - Black Anodized

## 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 writ ten 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