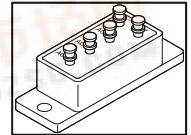


S424GH

SENSITRON SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 4293, REV. C



THREE PHASE FULL WAVE RECTIFIER ASSEMBLY

DESCRIPTION: 600 VOLT, 25 AMP, 5000 NS 3-PHASE FULL WAVE RECTIFIER ASSEMBLY.

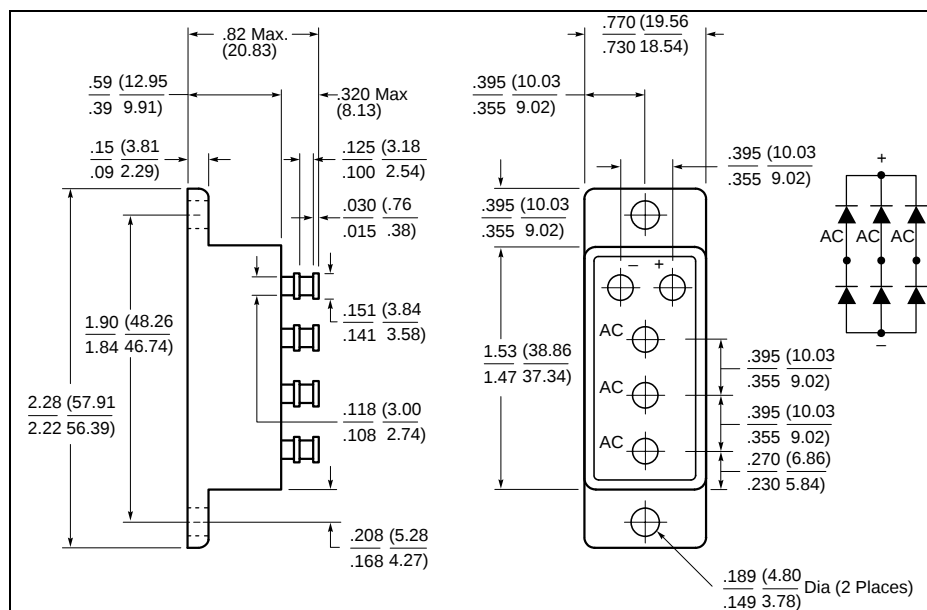
FEATURE: A Dielectric Withstanding Voltage test will be performed with the metal case of the assembly connected to ground and all four terminals connected to the high potential side of a DC power supply or scope display test. Voltage applied shall be 2800 Vdc and held for 10 seconds.

MAX RATINGS/ELECTRICAL CHARACTERISTICS ALL RATINGS ARE AT $T_C = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE (PER LEG)	PIV	600	Volts
MAXIMUM FORWARD VOLTAGE DROP (PER LEG) ($I_f = 39\text{ Adc}$) I_f @ 300 μsec pulse, duty cycle < 2%	V_f	1.2	Volts
MAXIMUM DC OUTPUT CURRENT ($T_C = 55^\circ\text{C}$) ($T_C = 100^\circ\text{C}$)	I_o	25 18.5	Amps Amps
PEAK SINGLE CYCLE SURGE CURRENT $t_p = 8.3\text{ ms}$ Single Half Cycle Sine Wave, Superimposed On Rated Load	I_{FSM}	150	Amps
MAXIMUM REVERSE RECOVERY TIME ($I_f = 0.5\text{A}$, $I_r = 1.0\text{A}$, t_{rr} measure @ 0.25A)	t_{rr}	5000	ns
MAXIMUM REVERSE CURRENT I_r @ PIV (PER LEG) ($T_C = 25^\circ\text{C}$) ($T_C = 100^\circ\text{C}$)	I_r	1.0 200	μA μA
MAXIMUM THERMAL RESISTANCE (PER LEG)	$R_{\theta JC}$	1.5	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	$T_{J, stg}$	-55 to + 150	$^\circ\text{C}$

SENSITRON
TECHNICAL DATA
DATA SHEET 4293, REV. C

MECHANICAL DIMENSIONS: In Inches / mm



*Case--black anodized. Potting surface—uncontrolled

Fig. 424

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.