

ASO | SERIES

PCB MOUNT



Features

- Mini-SIP SSR
- Ratings to 2A @ 280 VAC
- SCR output
- DC control
- Zero-crossing (resistive loads) or random-fire (inductive loads) output



Control Voltage	1.5 A	2 A
4-10 VDC	AS0241	ASO242

OUTPUT SPECIFICATIONS 1

Description	AS0241	AS0242
Operating Voltage (47-63Hz) [Vrms]	12-280	12-280
Transient Overvoltage [Vpk]	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.01	0.01
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/µsec] ³	500	500
Maximum Load Current [Arms] ³	1.5	2.0
Minimum Load Current [Arms]	0.025	0.06
Maximum Surge Current (16.6ms) [Apk]	40	120
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.5	1.5
Minimum Power Factor (with Maximum Load)	0.5	0.5





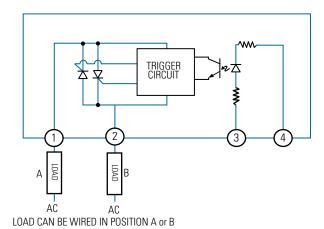
Description	Parameters
Control Voltage Range	4-10 VDC
Must Turn On Voltage	4.0 VDC
Must Turn Off Voltage	1.0 VDC
Typical Input Current @ 5 VDC	15 mAdc
Nominal Input Impedance	300 Ohm
Maximum Turn-On Time [msec]	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle

9

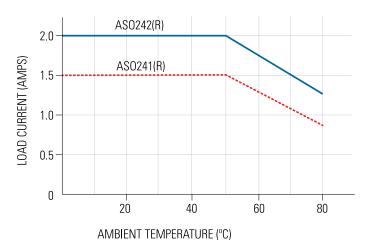
GENERAL SPECIFICATIONS

Description	Parameters	
Dielectric Strength, Input/Output/Base (50/60Hz) ²	2500 Vrms	
Minimum Insulation Resistance (@ 500 V DC) ²	10 ⁹ Ohms	
Maximum Capacitance, Input/Output	8.0 pF	
Ambient Operating Temperature Range	-30°C to 80°C	
Ambient Storage Temperature Range	-30°C to 125°C	
Weight (typical)	0.07 oz. (1.9g)	
Encapsulation	Thermally Conductive Epoxy	

WIRING DIAGRAM



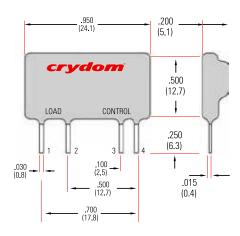
THERMAL DERATE INFORMATION



ASO Max. Load Current vs. Temp.

MECHANICAL SPECIFICATIONS

*Tolerances: ±0.02 in / 0.5 mm All dimensions are in: inches [millimeters]



AVAILABLE OPTIONS

Example: ASO241-R



Blank: Zero Voltage Turn-On **R:** Random Turn-On

crydom

^{*}Required for valid part number

^{**}For options only and not required for valid part number



- (1) All parameters at 25°C unless otherwise specified.
- (2) Dielectric and insulation resistance are measured between input and output
- (3) Off-State dv/dt test method per EIA/NARM standard RS-443

















RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching
- Follow proper mounting instructions including torque values
- Do not allow liquids or foreign objects to enter this product

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- · Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

Page 4

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (877) 502 5500 sales.crydom@sensata.com **Europe, Middle East & Africa**

+44 (1202) 416170 ssr-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com China +86 (21) 2306 1500 Japan +81 (45) 277 7117 Korea +82 (31) 601 2004 India +91 (80) 67920890 Rest of Asia +886 (2) 27602006 ext 2808