



## SSRC series

### 5A SIP Solid State Relay With Paired SCR Output

ANSI File E81606

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users also seek out the pertinent approvals files of the agencies/laboratories and review them to confirm the product meets the requirements for a given application.

#### Features

- SIP package permits high density population of PC board.
- 5A rms inverse-parallel connected SCR output.
- Choice of 240 or 480VAC nominal output.
- 3-15 / 4-15VDC input control.
- Zero voltage and random voltage turn-on versions.
- 4,000V rms optical isolation.
- Pinout compatible with OAC or OACM series output modules.

#### Engineering Data

**Form:** 1 Form A (SPST-NO).

**Duty:** Continuous.

**Isolation:** 4,000V rms input-to-output-to-ground.

**Insulation Resistance:** 10<sup>9</sup> Ohms, minimum, at 500VDC.

**Capacitance:** 10.0 pF maximum (input to output).

**Temperature Range:**

**Storage:** -30°C to +125°C

**Operating:** -30°C to +80°C

**Case Material:** Thermally conductive epoxy encapsulation.

**Case and Mounting:** Refer to outline dimension drawing.

**Termination:** Printed circuit terminals. Refer to outline dimension drawing.

**Approximate Weight:** 0.4 oz. (11.0g).

#### Ordering Information

Sample Part Number	►	SSRC	-240	D	5	R
<b>1. Basic Series:</b> SSRC = SIP Solid State Relay						
<b>2. Line Voltage:</b> 240 = 12 - 280 VAC 480 = 48 - 660 VAC						
<b>3. Input Type &amp; Voltage:</b> D = 3 - 15VDC (240V output types) or 4 - 15VDC (480V output types)						
<b>4. Maximum Switching Rating/Output:</b> 5 = 5.0A rms						
<b>5. Options:</b> Blank = Zero voltage turn-on R = Random voltage turn-on						

**Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.**

SSRC-240D5  
SSRC-240D5R

SSRC-480D5  
SSRC-480D5R

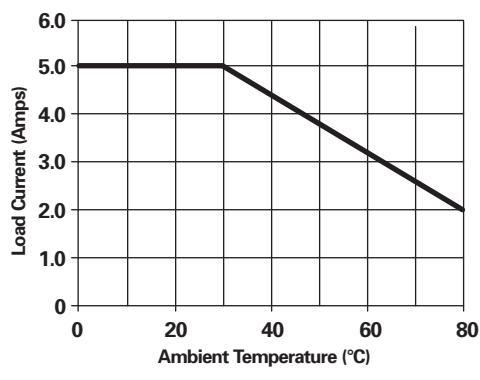
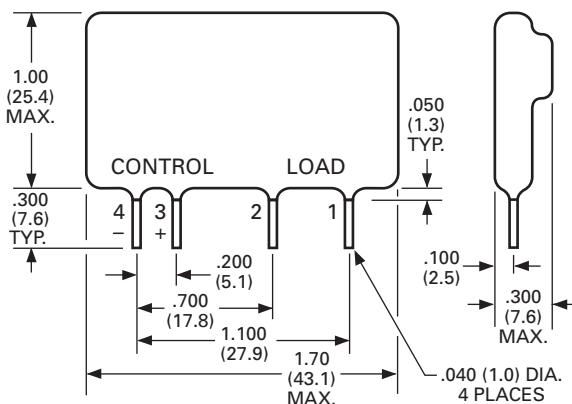
#### Input Specifications

Parameter	Conditions	Units	240V Output, Zero or Random V Turn-on	480V Output Units, Zero or Random V Turn-on
Control Voltage Range V <sub>IN</sub>	@ 25°C	VDC	3-15	4-15
Must Operate Voltage V <sub>IN(OP)</sub> (Min.)	@ 25°C	VDC	3.0	4.0
Must Release Voltage V <sub>IN(REL)</sub> (Min.)	@ 25°C	VDC	1.0	1.0
Input Current (Typ.)	@ 25°C	mA DC	15	15
Input Impedance (Nom.)	@ 25°C	ohms	300	240

**Output Specifications (@ 25° C, unless otherwise specified)**

Parameter	Conditions	Units	240V Nom. Output Units	480V Nom. Output Units
Load Voltage Range $V_L$	$f = 47-63$ Hz.	V rms	12-280	48-660
Repetitive Blocking Voltage (Min.)		V peak	$\pm 600$	$\pm 1200$
Load Current Range $I_L$ *	Resistive	A rms	.06-5.0	.06-5.0
Single Cycle Surge Current (Min.)		A peak	250	250
Leakage Current (Off-State) (Max.)	$f = 60$ Hz. $V_L = 280$ Vrms	mA rms	0.1	0.1
On-State Voltage Drop (Max.)	$I_L = \text{Max.}$	V peak	1.4	1.4
Static dv/dt (Off-State) (Min.)	$V_L = \text{Max.}$	V/ $\mu$ s	500	500
Turn-On Time (Max.)	$f = 60$ Hz.	ms	8.3 for Zero Voltage Turn-On Models 0.1 for Random Voltage Turn-On Models	8.3 for Zero Voltage Turn-On Models 0.1 for Random Voltage Turn-On Models
Turn-Off Time (Max.)	$f = 60$ Hz.	ms	8.3	8.3
$I^2t$ Rating	$t = 8.3$ ms	A Sec. <sup>2</sup>	260	260
Load Power Factor Rating (Min.)	$I_L = \text{Max.}$		0.5	0.5

\*See Thermal Derating Curves.

**Electrical Characteristics (Thermal Derating Curve)**

**Max. Load Current vs. Temp.**
**Outline Dimensions**

**PIN ASSIGNMENTS:**

- PIN 1: AC LOAD
- PIN 2: AC LOAD
- PIN 3: +DC INPUT
- PIN 4: -DC INPUT

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