

SSRC series

5A SIP Solid State Relay With Paired SCR Output

c Sus 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: 10⁹ 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	5	R
1. Basic Series: SSRC = SIP Solid State Relay		
2. Line Voltage: 240 = 12 - 280 VAC 480 = 48 - 660 VAC		
3. Input Type & Voltage: D = 3 - 15VDC (240V output types) or 4 - 15VDC (480V output types)		
4. Maximum Switching Rating/Output: 5 = 5.0A rms		
5. Options: 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-	
Control Voltage Range V _{IN}	@ 25°C	VDC	3-15	4-15	
Must Operate Voltage V _{IN(OP)} (Min.)	@ 25°C	VDC	3.0	4.0	
Must Release Voltage V _{IN(REL)} (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	

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Dimensions are in inches over (millimeters) unless otherwise specified. Dimensions are shown for reference purposes only. Specifications and availability subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

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

arameter 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	±600	±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.)	$f = 60 \text{ Hz. V}_{L} = 280 \text{Vrms}$	mA rms	0.1	0.1	
On-State Voltage Drop (Max.)	I _L = Max.	V peak	1.4	1.4	
Static dv/dt (Off-State) (Min.)	V _L = Max.	V/µs	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 ² t Rating	t = 8.3 ms	A Sec. ²	260	260	
Load Power Factor Rating (Min,)	I _L = 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

Disclaimer

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