



SSRDC Series

DC Load Solid State Relay Hockey Puck

 File E29244

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 ensure the product meets the requirements for a given application.

Features

- Standard "hockey puck" package.
- LED indicator.
- 12, 25 & 40A versions.
- 200V DC output types.
- DC input and output versions.
- 1500V DC optical isolation.
- Cover design with anti-rotation barriers

Engineering Data

Form: 1 Form A (SPST-NO).

Duty: Continuous.

Isolation: 1500V DC minimum.

Temperature Range:

Storage: -30°C to +100°C

Operating: -30°C to +80°C.

Case Material: Plastic, UL rated 94V-0.

Case and Mounting: Refer to outline dimension.

Termination: Refer to outline dimension.

Approximate Weight: For 12A : 4.09 oz. (116g).
For 25A & 40A : 5.11 oz. (145g).

Ordering Information

	Typical Part Number	SSRDC	200	D	25
1. Basic Series:	SSRDC = DC Load hockey puck solid state relay				
2. Line Voltage:	5-200VDC				
3. Input Type & Voltage:	D = 3.5 - 32VDC				
4. Maximum Switching Rating:	12 = 12A, mounted to heatsink 25 = 25A, mounted to heatsink 40 = 40A, mounted to heatsink				

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

SSRDC-200D12
SSRDC-200D25
SSRDC-200D40

Input Specifications

Parameter	Units	SSRDC-200D12 SSRDC-200D25 SSRDC-200D40
Control Voltage Range V_{IN}	VDC	3.5 - 32
Must Operate Voltage $V_{IN(OP)}$ (Min.)	VDC	3.5
Must release Voltage $V_{IN(REL)}$ (Min.)	VDC	1
Input Current (Max.)	mA	30

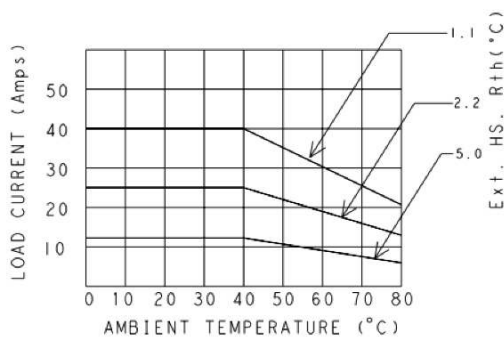
SSRDC Series (Continued)

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

Parameter	Units	12A Models	25A Models	40A Models
Load Voltage Range V_L	VDC	5-200VDC	5-200VDC	5-200VDC
Load Current Range I_L *	A	12	25	40
Single Cycle Surge Current	A	120	120	200
Leakage Current (Off-State) @Rated Current	mA	12	12	12
On-State Voltage Drop @Rated Current	VDC	2.83	2.83	2.83
Turn-On Time (Max.)	μ s	600	600	600
Turn-Off Time (Max.)	μ s	2600	2600	2600
Thermal Resistance, Junction to Case	$^{\circ}$ C/W	0.7	0.7	0.5

*See the derating curve

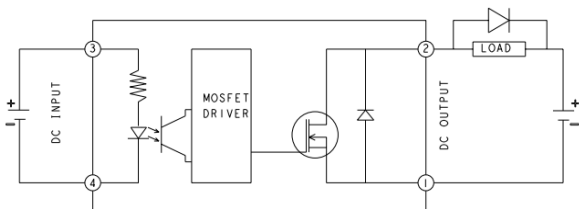
Electrical Characteristics (Thermal Derating Curves)



Heatsink Recommendations

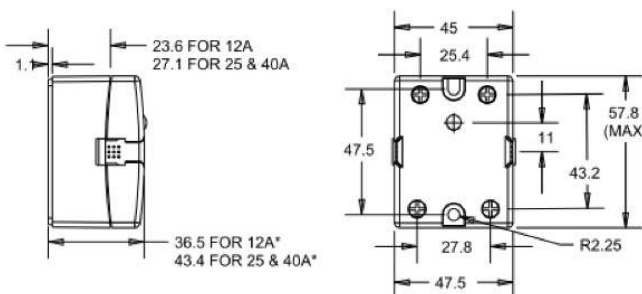
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85 $^{\circ}$ C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch flatness across mating area), un-painted surface which is clean and free of oxidation.
- An even coating of thermal compound (Dow Corning DC340 or equivalent) should be applied to both the heatsink and module
- The module should be mounted to the heatsink using two #8 screws.

Operating Diagrams



Type	Screw size	Head Type
Input	M3.5	Pan head phillips
Output	M4	

Outline Dimensions



* Overall height dimensions includes with clear cover
Dimensions in mm

Product Code	Part Number
SSRDC-200D12	2330274-1
SSRDC-200D25	2330274-2
SSRDC-200D40	2330274-3

To view the Solid-State relay application notes
[click here](#)