





# **SSRDC Series**

# **DC Load Solid State Relay Hockey Puck**

**chi**us 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			J	
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 VIN	VDC	3.5 - 32
Must Operate Voltage VIN(OP) (Min.)	VDC	3.5
Must release Voltage VIN(REL) (Min.)	VDC	1
Input Current (Max.)	mA	30



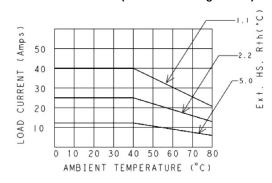
# **SSRDC Series** (Continued)

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

Parameter	Units	12A Models	25A Models	40A Models
Load Voltage Range V∟	VDC	5-200VDC	5-200VDC	5-200VDC
Load Current Range I. *	А	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.)	μs	600	600	600
Turn-Off Time (Max.)	μs	2600	2600	2600
Thermal Resistance, Junction to Case	°C/W	0.7	0.7	0.5

<sup>\*</sup>See the derating curve

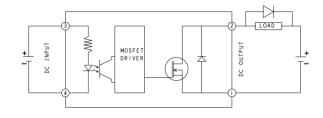
#### **Electrical Characteristics (Thermal Derating Curves)**



#### **Heatsink Recommendations**

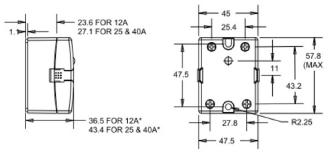
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch 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**



Туре	Screw size	Head Type
Input	M3.5	Don bood abilling
Output	M4	Pan head phillips

#### **Outline Dimensions**



<sup>\*</sup> Overall height dimensions includes with clear cover Dimensions in mm

# <u>To view the Solid-State relay application notes</u> <u>click here</u>

<b>Product Code</b>	Part Number
SSRDC-200D12	2330274-1
SSRDC-200D25	2330274-2
SSRDC-200D40	2330274-3