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# 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<br>25 = 25A, mounted to heatsink<br>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<br>SSRDC-200D25<br>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 |



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Datasheets, product data, ‘Definitions’ section, application notes and all specifications are subject to change.

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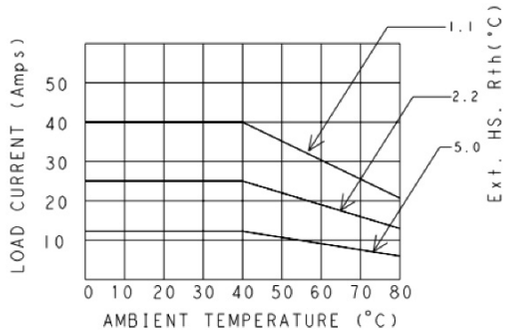
## SSRDC Series (Continued)

### 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.) | 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 |

*See the derating curve

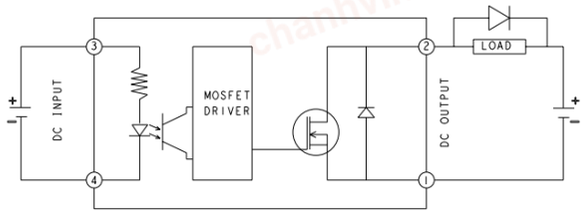
### Electrical Characteristics (Thermal Derating Curves)




### Heatsink Recommendations

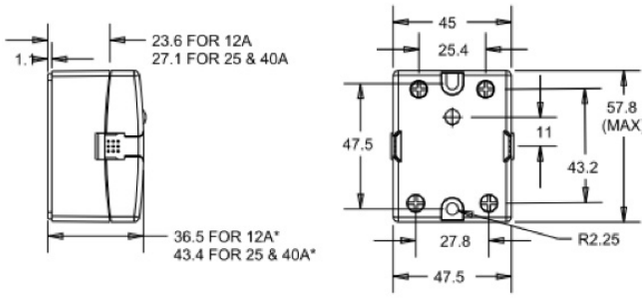
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch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




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

### Outline Dimensions




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

* Overall height dimensions includes with clear cover
Dimensions in mm

**To view the Solid-State relay application notes click here**



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