



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: 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

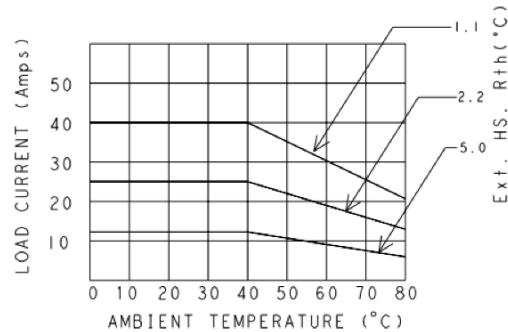
Input Specifications

| 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 |

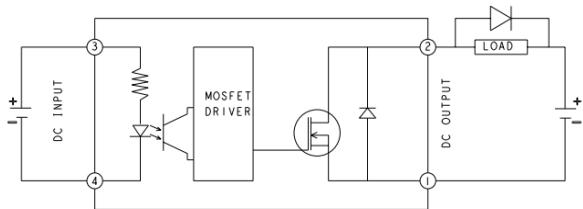
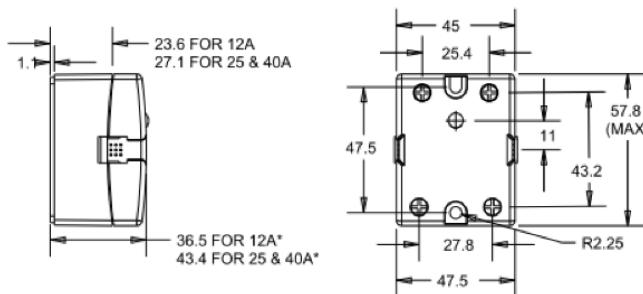
SSRDC Series (Continued)
Output Specifications (@ 25° C, unless otherwise specified)

| Parameter | Units | 12A Models | 25A Models | 40A Models |
|--|---------|------------|------------|------------|
| Load Voltage Range V_L | VDC | 200 | 200 | 200 |
| 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 | °C/W | 0.7 | 0.7 | 0.5 |

* See 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

Outline Dimensions

* Overall height dimensions includes with clear cover
Dimensions in mm