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

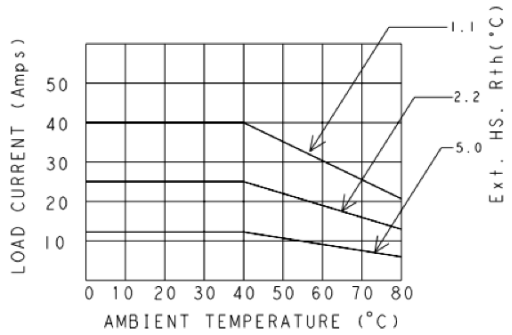
SSRDC Series (Continued)

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.)	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 Derating curve

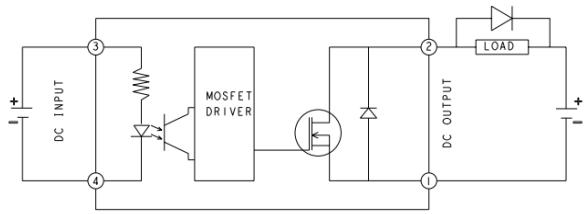
Electrical Characteristics (Thermal Derating Curves)



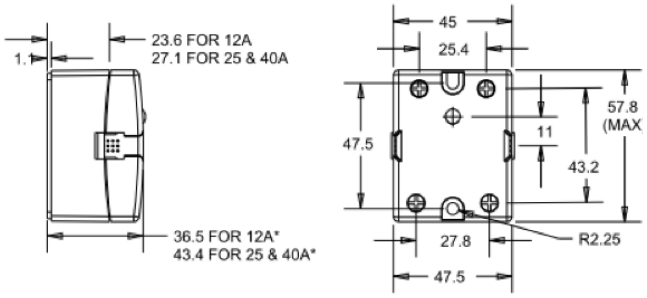
Heatsink Recommendations

- 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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity:

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