



## 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
<b>1. Basic Series:</b>	SSRDC = DC Load hockey puck solid state relay				
<b>2. Line Voltage:</b>	200VDC				
<b>3. Input Type &amp; Voltage:</b>	D = 3.5 - 32VDC				
<b>4. Maximum Switching Rating:</b>	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

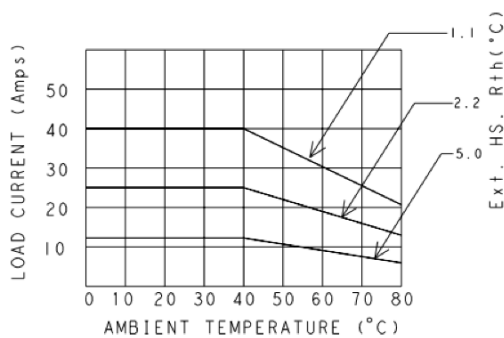
**SSRDC Series (Continued)**

**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.)	$\mu$ s	600	600	600
Turn-Off Time (Max.)	$\mu$ s	2600	2600	2600
Thermal Resistance, Junction to Case	$^{\circ}$ C/W	0.7	0.7	0.5

\* See Derating curve

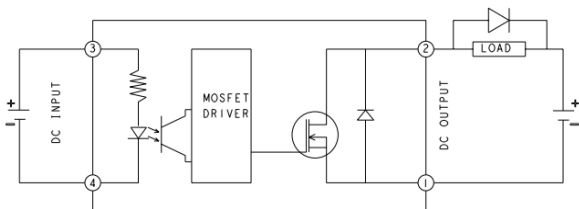
**Electrical Characteristics (Thermal Derating Curves)**



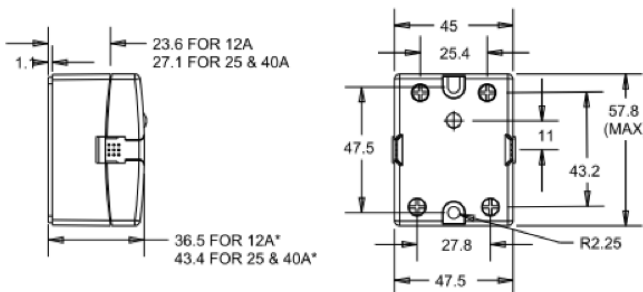
**Heatsink Recommendations**

- 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