



## SSRT Series

### “Hockey Puck” Solid State Relay

 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.
- Floating terminal design.
- Triac outputs.
- 10A & 25A rms versions.
- AC & DC input versions.
- 4000V rms isolation.
- Cover design with anti-rotation barrier

#### Engineering Data

**Form:** 1 Form A (SPST-NO).

**Duty:** Continuous.

**Isolation:** 4000V rms minimum, input - output.

**Temperature Range:**

**Storage:** -30°C to +100°C

**Operating Temperature:** -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:** 3.5 oz. (98g).

#### Ordering Information

Typical Part Number ► **SSRT -240 D 10**

**1. Basic Series:** SSRT = “hockey puck” triac output solid state relay

**2. Line Voltage:** 240 = 24 - 280 VAC

**3. Input Type & Voltage:** A = 90 - 280 VAC linear  
D = 3 - 32 VDC constant current

**4. Maximum Switching Rating:** 10 = .1 - 10A rms, mounted to heatsink  
25 = .1 - 25A rms, mounted to heatsink

**Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.**

SSRT-240A10    SSRT-240D10  
SSRT-240A25    SSRT-240D25

#### Input Specifications

Parameter	AC Input	DC Input
Control Voltage Range $V_{in}$	90 - 280VAC	3 - 32VDC
Must Operate Voltage $V_{in(OP)}$ (Min.)	90VAC	3VDC
Must release Voltage $V_{in(REL)}$ (Min.)	10VAC	1VDC
Input Current (Max.)	25mA	20mA

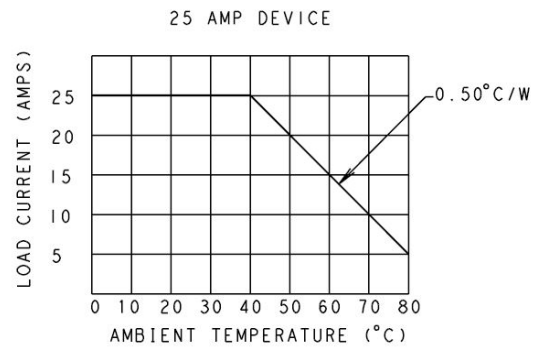
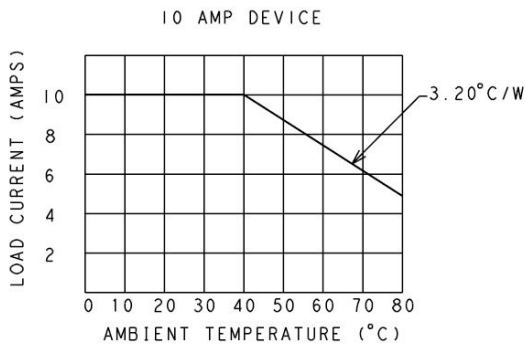
**SSRT Series** (Continued)

**Output Specification (@ 25°C, unless otherwise specified)**

Parameter	Conditions	Units	SSRT-240A10 SSRT-240D10	SSRT-240A25 SSRT-240D25
Load Voltage Range $V_L$		V rms	24 - 280	
Repetitive Blocking Voltage (Min.)		V peak	600	
Load Current Range $I_L^*$	Resistive	A rms	.1 - 10	.1 - 25
Single Cycle Surge Current (Min.)		A peak	100	260
Leakage Current (Off-State) (Max.)	f = 60 Hz. $V_L = \text{Nom}$ (120 or 240 V rms)	mA rms	5	
On-State Voltage Drop (@rated current)	$I_L = \text{Max.}$	V rms	1.6	1.6
Static dv/dt (Off-State) (Min.)		V/ $\mu$ s	400	500
Thermal Resistance, Junction to Case ( $R_{\theta J-C}$ ) (Max.)		$^{\circ}\text{C}/\text{W}$	2.4	1.7
Turn-On Time (Max.)	f = 60 / 50 Hz.	ms	8.3/10 of DC input types, 40 for AC input types	
Turn-Off Time (Max.)	f = 60 / 50 Hz.	ms	8.3/10 of DC input types, 80 for AC input types	
I <sup>2</sup> T Rating	t = 8.3 ms	A <sup>2</sup> Sec.	144	340
Load Power Factor Rating	$I_L = \text{Max.}$		0.5 - 1.0	

\* See Derating curve

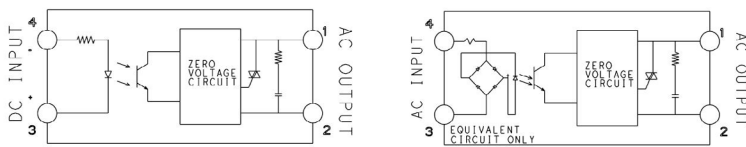
**Electrical Characteristics (Thermal Derating Curves)**



**Heatsink Recommendations**

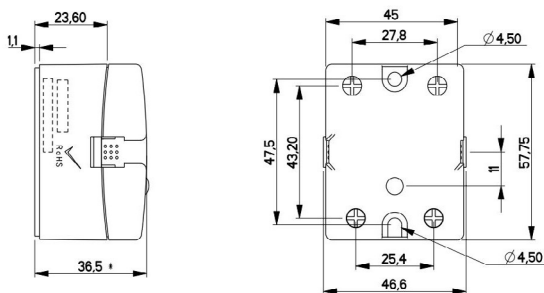
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch 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 mounting surfaces and spread to a uniform depth of .002" to eliminate all air pockets.
- 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**



\* OVERALL HEIGHT DIMENSION INCLUDES WITH CLEAR COVER  
DIMENSION IN mm

Product Code	Part Number
SSRT-240A10	1-1393030-9
SSRT-240A25	2-1393030-0
SSRT-240D10	2-1393030-1
SSRT-240D25	2-1393030-2

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