



# **SSRT** series

"Hockey Puck" Solid State Relay With **Snubberless Triac Output** 

c**SL**°us 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.
- Enhanced noise immunity (designed to meet level 3 requirements of European EMC Directive).
- LED indicator.
- Floating terminal design.
- Low cost snubberless triac outputs.
- 10A & 25A rms versions.
- AC & DC input versions.
- 4000V rms isolation.
- New housing design with anti-rotation barriers

#### **Engineering Data**

Form: 1 Form A (SPST-NO).

**Duty:** Continuous.

Isolation: 4000V rms minimum, input - output. Capacitance: 8.0 pf typical (input to output).

Temperature Range:

Storage: -40°C to +100°C

Operating Temperature: -20°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**

**SSRT** -240 D 10 Sample Part Number

- 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	
	Zero V Turn-on Units	Zero and Random V Turn-on Units	
Control Voltage Range V <sub>IN</sub>	90 - 280VAC	3 - 32VDC	
Must Operate Voltage V <sub>IN(OP)</sub> (Min.)	90VAC	3VDC	
Must Release Voltage V IN(REL) (Min.)	10VAC	1VDC	
Input Current (Max.)	15mA	15mA	

otherwise specified.

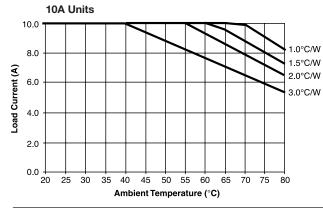


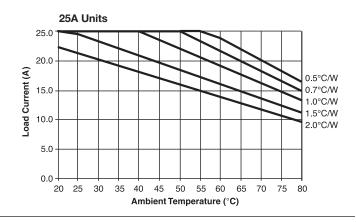
#### Output Specification (@ 25°C, unless otherwise specified)

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	<del>-</del> 600	
Load Current Range I <sub>L</sub> *	Resistive	A rms	.1 - 10	.1 - 25
Single Cycle Surge Current (Min.)		A peak	100	250
Leakage Current (Off-State) (Max.)	f = 60 Hz. V <sub>L</sub> = Nom. (120 or 240 V rms)	mA rms	.1	
On-State Voltage Drop (Max.)	I <sub>L</sub> = Max.	V peak	1.5	1.3
Static dv/dt (Off-State) (Min.)		V/s	500	
Thermal Resistance, Junction to Case (R <sub>θj·c</sub> ) (Max.)		C/W	2.2	1.7
Turn-On Time (Max.)	f = 60 Hz.	ms	8.3 for DC input types, 20 for AC input types	
Turn-Off Time (Max.)	f = 60 Hz.	ms	8.3 for DC input types, 30 for AC input types	
I <sup>2</sup> t Rating	t = 8.3 ms	A <sup>2</sup> Sec.	41	240
Load Power Factor Rating	I <sub>L</sub> = Max.		0.5 - 1.0	

<sup>\*</sup>See Derating Curves

#### **Electrical Characteristics (Thermal Derating Curves)**

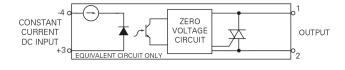


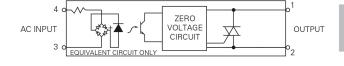


#### **Heatsink Recommendations**

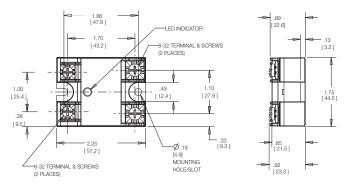
- We recommend that solid state relay modules be mounted to a heatsink sufficient to maintain the module's base temperature at less than 85°C under worst case ambient temperature and load conditions.
- The heatsink mounting surface should be a smooth (30-40 micro-inch finish), flat (30-40 micro-inch 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#10 screws.

#### **Operating Diagrams**





#### **Outline Dimensions**



# AMEYA360 Components Supply Platform

## **Authorized Distribution Brand:**

























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