



# Product Change Notification

Current Date: 14-Nov-2017

## TE Connectivity

**Product Change Notification:** P-17-015049

**PCN Date:** 13-NOV-17

**Customer:** DISTRIBUTOR NA ( 66666661 )

**Location:** NO CITY PROVIDED

**Agreement:** 120513180001

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

<b>General Product Description:</b>
Solid State Relays - SSRD Series

<b>Description of Changes</b>
Change of Specifications and Change of Manufacturing location (Subcon and supplier changes) Key electrical specification changes are listed below: 1. Single cycle surge current changed from 500A to 300A for 25A and 780 to 800 for 40A 2. Thermal resistance (Junction to case) changed from 0.6 to 2.35 C/W for 25 amps 3. Thermal resistance (Junction to case) changed from 0.6 to 0.86 C/W for 40 amps 4. I2T Rating changed from 1040 to 510A2sec for 25A 5. I2T Rating changed from 2435 to 3745A2sec for 40A 6. Color of SSRD is changed from white to black
Color Change

**Other attachments:**[Datasheet](#)**Reason for Changes:**

Reduced new product development cycle

**Estimated Dates:****Last Order Date** (Obsolete Parts Only):**First Date To Ship** (Changed Parts Only):

01-JAN-2018

**Last Ship Date** (Obsolete Parts Only):**Last Date for Mixed Shipments:** (Changed Parts Only):

01-MAR-2018

**Part Number(s) being Modified:**

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
<a href="#">1-1393030-4</a>	NO			SSRD-240D25			
<a href="#">1-1393030-5</a>	NO			SSRD-240D25R			
<a href="#">1-1393030-6</a>	NO			SSRD-240D40			



**SSRD Series**

**Dual AC Output “Hockey Puck”  
Solid State Relay With  
Paired SCR Outputs**

**UL** 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**

- Two independent AC output solid state relays in one standard package.
- Inverse parallel SCR outputs.
- 25A rms & 40A rms versions available.
- Zero voltage and random voltage turn-on versions.
- 4000V rms optical isolation.
- Quick connect style terminals.

**Engineering Data**

- Form:** 2 Form A (2 SPST-NO).
- Duty:** Continuous.
- Isolation:** 4000V rms input-to-output;  
2500V rms input or output to ground.
- 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:** 3.17 oz (90g)

**Ordering Information**

	Typical Part Number	SSR	-240	D	25	R
<b>1. Basic Series:</b> SSRD = Dual output SSR - 2 SPST - NO						
<b>2. Line Voltage:</b> 240 = 24 - 280VAC						
<b>3. Input Type &amp; Voltage:</b> D = 4 - 15VDC DE = 18 - 32VDC						
<b>4. Maximum Switching Rating/Output:</b> 25 = .1 - 25A rms @ 25°C, mounted to heatsink 40 = .1 - 40A rms @ 25°C, mounted to heatsink						
<b>5. Options:</b> Blank = Zero voltage turn-on (both outputs) R = Random voltage turn-on (both outputs)						

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

SSRD-240D25      SSRD-240D40

**Input Specifications**

Parameter	Units	SSRD-240D25 SSRD-240D25R SSRD-240D40 SSRD-240D40R	SSRD-240DE25 SSRD-240DE25R SSRD-240DE40 SSRD-240DE40R
Control Voltage Range $V_{IN}$	VDC	4 - 15	18 - 32
Must Operate Voltage $V_{IN(OP)}$ (Min.)	VDC	4.0	18
Must Release Voltage $V_{IN(REL)}$ (Min.)	VDC	1	1
Input Current	mA DC	3 - 40	3 - 40
Input Current (Typical)	mA DC	15 @ 8 Vdc	20 @ 24 Vdc
Input Resistance	Ohms	375	800

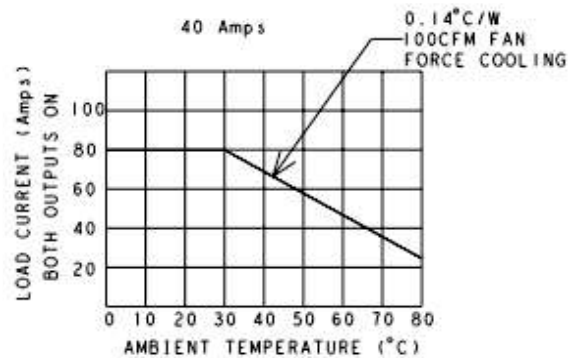
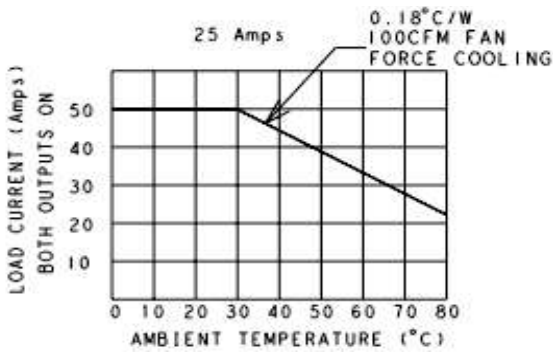
**SSRD Series** (Continued)

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

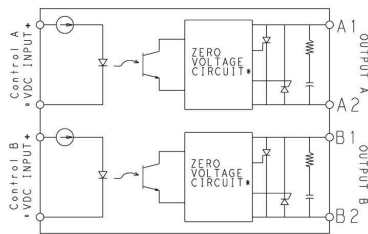
Parameter	Conditions	Units	25A Models	40A Models
Load Voltage Range $V_L$	$f = 47 - 63$ Hz.	V rms	24 - 280	
Peak Voltage (Min.)	$t = 1$ Min.	V peak	600	
Load Current Range $I_L^*$	Resistive	A rms	.1 - 25	.1 - 40
Single Cycle Surge Current (Max.)		A peak	300	800
Leakage Current (Off-State) (Max.)	$V_L = 280$ V rms	mA rms	5.0	
On-State Voltage Drop (Max.)	$I_L = \text{Max.}$	V peak	1.6	1.8
Static $dv/dt$ (Off-State) (Min.)		V/ $\mu$ s	300	500
Thermal Resistance, Junction to Baseplate ( $R_{\theta j-c}$ ) (Max.)	Both sections On	°C/W	2.35	.86
Turn-On Time (Max.)	$f = 60 / 50$ Hz.	ms	8.3 / 10 for Zero Voltage Turn-On Models 0.1 for Random Voltage Turn-On Models	
Turn-Off Time (Max.)	$f = 60 / 50$ Hz.	ms	10 for Zero & 8.3 for Random Voltage turn ON	
I <sup>2</sup> T Rating	$t = 8.3$ ms	A <sup>2</sup> Sec.	510	3745
Load Power Factor Rating	$I_L = \text{Max.}$		0.5 - 1.0	

\* See Derating curve

**Electrical Characteristics (Thermal Derating Curves)**



**Operating Diagram**

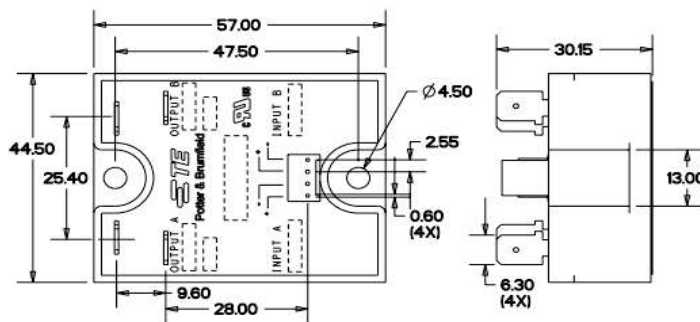


Random Turn-on units have a Random Turn-on circuit instead of zero voltage circuit

**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.

**Outline Dimensions**



DIMENSION IN mm

Input Terminal Connectors are available from several different manufacturers.

TE P/N: 103976-3 or 640440-4  
Methode P/N: 1300-004-422

Consult your local distributor for these or equivalent connectors.