



Introducing SIP PC Board & Rail/Panel-Mount Solid State Relays

SSRA, SSRC, SSRF, SSRK and SSRM Series

SIP PC Board & Rail/Panel Mount Solid State Relays

KEY FEATURES

Quiet operation

Long service life

Optical coupling provides 2500 to 4000V isolation (model dependent)

Inverse parallel connected SCR output in all types

Low leakage current

Integral heatsinks on some models

Maximum ratings from 2A to 25A for SIP PC board relays

Maximum ratings from 10A to 65A for DIN rail/panel mount relays

DESCRIPTION

Solid state relays in various SIP PC board packages or DIN-rail/panel mount packages

Maximum current ratings from 2A to 25A for PC board models and from 10A to 65A for rail/panel mount types.

APPLICATIONS

Properly applied, these solid state relays deliver the long service life demanded by a variety of applications where loads are frequently cycled on and off.

The control of heating elements, motors and lamps in industrial machinery and commercial equipment are typical applications.

Theatrical lighting systems, traffic controls and institutional door controls also benefit from the switching characteristics of these solid state relays.

Medical applications such as blood analysis equipment, portable vital signs monitors, lasers, scanners and baby warmers may also require switching characteristics such as those demonstrated by SIP PC board mount solid state relays.

The quiet operation of these solid state relays makes them desirable in applications wherever audible noise must be kept to a minimum.

Models are available in both zero voltage turn-on and random voltage turn-on versions, permitting users to select the relay with the preferred switching characteristics for a given application.

MECHANICAL

PC board models SSRA, SSRC and SSRF are in a SIP configuration with terminals on 0.1 in (2.54 mm) spacing.

DIN rail / panel mount models SSRK and SSRM can either snap onto a 35mm DIN rail or they may be mounted directly to a panel with screws. Finger-safe (IP20) screw clamps are provided for load and control connections, and a #10 screw is provided for ground termination.

STANDARDS AND SPECS

SSRC series solid state relays are UL Recognized for the US and Canada, UL File E81606

SSRA, SSRF and SSRM series solid state relays are UL Recognized for the US and Canada, UL File E29244

SSRK series solid state relays are UL Recognized for the US, UL File E29244, and CSA Certified for Canada, CSA File LR246041.



SIP PC Board & Rail/Panel Mount Solid State Relays

PRODUCT OVERVIEW



Series	SSRA	SSRC	SSRF	SSRK	SSRM
Mounting	PC Board	PC Board	PC Board	DIN Rail or Panel	DIN Rail or Panel
Features	<ul style="list-style-type: none"> • Miniature size • 2A rating • 2500V isolation • Zero voltage or random voltage turn-on 	<ul style="list-style-type: none"> • 5A rating • 4000V isolation • Zero voltage or random voltage turn-on 	<ul style="list-style-type: none"> • Integral heatsink • 25A rating • 4000V isolation • Zero voltage or random voltage turn-on 	<ul style="list-style-type: none"> • Integral heatsink • 10 - 30A rating • 4000V isolation • LED indicator • Finger-safe load and control terminals 	<ul style="list-style-type: none"> • Integral heatsink • 45 - 65A rating • 4000V isolation • LED indicator • Finger-safe load and control terminals
Approximate Size and Weight	.95" x .5" x .2"d (24 x 13 x 5d) .15 oz. (4.3g)	1.7" x 1" x .3"d (43 x 25 x 8d) .4 oz. (11g)	1.7" x 1" x .9"d (43 x 25 x 23d) .85 oz. (25g)	.89" x 3.9" x 3.2"d (22.5 x 99 x 81d) 9.9 oz. (284g)	1.75" x 4.3" x 3.0"d (44.5 x 109 x 76d) 16.9 oz. (479g)
Form	1 Form A (SPST-NO)	1 Form A (SPST-NO)	1 Form A (SPST-NO)	1 Form A (SPST-NO)	1 Form A (SPST-NO)
Line Voltage	24 - 280VAC	12 - 280VAC 48 - 660VAC	12 - 280VAC 48 - 660VAC	48 - 660VAC	48 - 660VAC
Current Rating	2A rms at 50°C (convection cooling)	5A rms at 30°C (convection cooling)	25A rms at 85°C (forced air cooling)	10, 20 or 30A rms at 25°C (convection cooling)	45, 55 or 65A rms at 25°C (convection cooling)
Input Voltage	4 - 10VDC	3 - 15VDC (4 - 15 for 480V models)	3 - 15VDC (4 - 15 for 480V models)	90 - 280VAC 4 - 32VDC	90 - 140VAC 4 - 32VDC
Isolation	2500V rms input-to-output-to-ground	4000V rms input-to-output-to-ground	4000V rms input-to-output-to-ground	4000V rms input-to-output-to-ground	4000V rms input-to-output-to-ground
Repetitive Blocking Voltage	+/- 600Vpeak	+/- 600Vpeak (+/- 1200Vpeak for 480V models)	+/- 600Vpeak (+/- 1200Vpeak for 480V models)	+/- 1200Vpeak	+/- 1200Vpeak
Website Search Keyword	SSRA	SSRC	SSRF	SSRK	SSRM
Data Sheet Number	8-1773454-1	8-1773454-2	8-1773454-3	8-1773454-4	8-1773454-5

Consult data sheets for detailed specifications. All part numbers in series described above are RoHS compliant.

FOR MORE INFORMATION

Technical Support

Internet:	www.tycoelectronics.com
USA:	1-800-522-6752
Canada:	1-905-470-4425
Mexico:	52-55-1106-0800
C. America:	57-1-254-4444
South America:	55-11-2103-6000
Hong Kong:	852-2735-1628
Japan:	81-44-844-8013
UK:	44-208-420-8341

Disclaimer

While Tyco Electronics has made every reasonable effort to ensure the accuracy of the information in this catalog, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current.

Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose.

The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult Tyco Electronics for the latest dimensions and design specifications. The TE logo and Tyco Electronics are trademarks.

Tyco Electronics Corporation
Harrisburg, PA

tycoelectronics.com

Copyright 2009 By Tyco Electronics Corporation
8-1773454-0—0.0M—KRG/PDF 04-09
The TE logo and Tyco Electronics are trademarks.



Mouser Electronics

Authorized Distributor

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

[TE Connectivity:](#)

[SSRF-480D25](#)