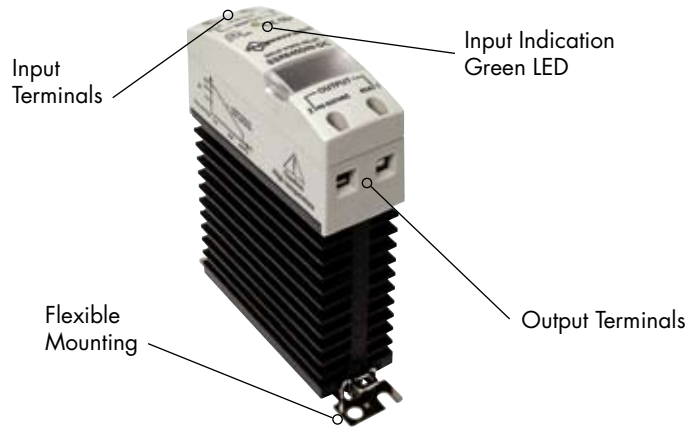


# SSRDIN/SPST, 10 - 40 Amp Rating



## General Specifications (@ 25° C) (UL 508)

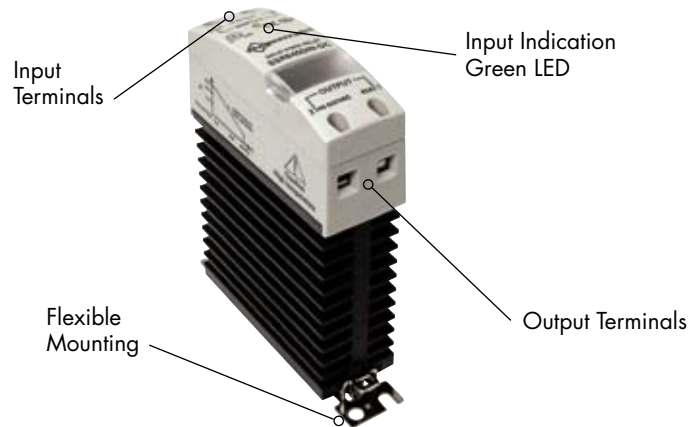
| Output Characteristics                                |     | Units                  | SSR210DIN-AC               | SSR225DIN-AC               |
|---|-----|------------------------|----------------------------|----------------------------|
| Number and type of Contacts                           |     |                        | SPST-NO                    | SPST-NO                    |
| Switching Device                                      |     |                        | SCR (2)                    | SCR (2)                    |
| Current rating  |     | A                      | 10                         | 25                         |
| Switching voltage                                     |     | V                      | 24....280 AC               | 24....280 AC               |
| Switching Type  |     |                        | Zero Cross                 | Zero Cross                 |
| Maximum zero turn-on voltage (Vpk)                    |     | V                      | 35                         | 35                         |
| Maximum Rate of Rise Off State Voltage (dv/dt)        |     | V/us                   | 500                        | 500                        |
| Incandescent Lamp Ampere Rating (rms)                 |     | A                      | 8                          | 16                         |
| Motor Load Rating (rms)                               |     | A                      | 4.5                        | 8                          |
| Min. Load current to maintain on                      |     | mA                     | 50                         | 120                        |
| Non-Repetitive Surge Current (1 cycle)                |     | A                      | 83                         | 800                        |
| Max. RMS overload current (1 second)                  |     | A                      | 24                         | 40                         |
| Max. Off state leakage current (rms)                  |     | mA                     | 10                         | 10                         |
| Typical On State Voltage Drop (rms)                   |     | V                      | 1.25 AC                    | 1.35 AC                    |
| Max. On State Voltage Drop (rms)                      |     | V                      | 1.6 AC                     | 1.8 AC                     |
| Maximum I <sup>2</sup> T for Fusing (A <sup>2</sup> ) |     |                        | 83                         | 3700                       |
| Input Characteristics                                 |     |                        |                            |                            |
| Voltage Range   |     | V                      | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC |
| Must Release Voltage                                  |     | V                      | 10 AC                      | 10 AC                      |
| Nominal Input Impedance                               |     | Ω                      | 16....25K                  | 16....25K                  |
| Typical Input Current @ 5VDC or 240VAC                |     | mA                     | 12                         | 12                         |
| Reverse Polarity Protection                           |     |                        | N/A                        | N/A                        |
| Performance Characteristics                           |     |                        |                            |                            |
| Operating time (response time)                        | On  | ms                     | 8.3                        | 8.3                        |
|   | Off | ms                     | 8.3                        | 8.3                        |
| Rated insulation voltage                              |     | V                      | 4000 AC                    | 4000 AC                    |
| Dielectric strength                                   |     | V                      | 4000 AC                    | 4000 AC                    |
| Environment   |     |                        |                            |                            |
| Product certifications                                |     | Standard version       | UL, CSA, CE                | UL, CSA, CE                |
| Ambient air temperature around the device             |     | Storage                | °C                         | -40...+100                 |
|   |     | Operation              | °C                         | -30...+80                  |
| Degree of protection                                  |     |                        | IP 20                      | IP 20                      |
| Miscellaneous Characteristics                         |     |                        |                            |                            |
| Thermal Resistance (Junction to Case)                 |     | °C/W                   | 1.5                        | 0.43                       |
| Integral Heat sink                                    |     | °C/W                   | 2.2                        | 2.2                        |
| Weight  |     | g (oz)                 | 320 (11.3)                 | 326 (11.5)                 |
| LED   |     | Input                  | Green                      | Green                      |
| Terminal Wire Capacity                                |     | AWG (mm <sup>2</sup> ) | 8 (10)                     | 8 (8.4)                    |
| Terminal Torque (maximum)                             |     | in lb (Nm)             | 12.5 (1.4)                 | 12.5 (1.4)                 |

SECTION 4



| SSR240DIN-AC               | SSR610DIN-AC               | SSR625DIN-AC               | SSR640DIN-AC               |
|----------------------------|----------------------------|----------------------------|----------------------------|
| SPST-NO                    | SPST-NO                    | SPST-NO                    | SPST-NO                    |
| SCR (2)                    | SCR (2)                    | SCR (2)                    | SCR (2)                    |
| 40                         | 10                         | 25                         | 40                         |
| 24....280 AC               | 48....600 AC               | 48....600 AC               | 48....600 AC               |
| Zero Cross                 | Zero Cross                 | Zero Cross                 | Zero Cross                 |
| 35                         | 35                         | 35                         | 35                         |
| 500                        | 200                        | 700                        | 500                        |
| 20                         | 8                          | 16                         | 20                         |
| 14                         | 4.5                        | 8                          | 14                         |
| 250                        | 80                         | 250                        | 250                        |
| 800                        | 83                         | 1000                       | 800                        |
| 100                        | 24                         | 50                         | 100                        |
| 10                         | 10                         | 10                         | 10                         |
| 1.6 AC                     | 1.25 AC                    | 1.35 AC                    | 1.6 AC                     |
| 1.6 AC                     | 1.6 AC                     | 1.6 AC                     | 1.6 AC                     |
| 3700                       | 83                         | 1700                       | 3700                       |
| 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC | 90....280 AC, 80....140 DC |
| 10 AC                      | 10 AC                      | 10 AC                      | 10 AC                      |
| 13K                        | 16....25K                  | 16....25K                  | 13K                        |
| 16                         | 12                         | 12                         | 16                         |
| N/A                        | N/A                        | N/A                        | N/A                        |
| 10                         | 8.3                        | 8.3                        | 10                         |
| 10                         | 8.3                        | 8.3                        | 10                         |
| 4000 AC                    | 4000 AC                    | 4000 AC                    | 4000 AC                    |
| 4000 AC                    | 4000 AC                    | 4000 AC                    | 4000 AC                    |
| UL, CSA, CE                | UL, CSA, CE                | UL, CSA, CE                | UL, CSA, CE                |
| -40...+100                 | -40...+100                 | -40...+100                 | -40...+100                 |
| -30...+80                  | -30...+80                  | -30...+80                  | -30...+80                  |
| IP 20                      | IP 20                      | IP 20                      | IP 20                      |
| 0.43                       | 1.8                        | 0.43                       | 0.43                       |
| 2.2                        | 2.2                        | 2.2                        | 2.2                        |
| 332 (11.7)                 | 320 (11.3)                 | 326 (11.5)                 | 332 (11.7)                 |
| Green                      | Green                      | Green                      | Green                      |
| 8 (10)                     | 8 (10)                     | 8 (10)                     | 8 (10)                     |
| 12.5 (1.4)                 | 12.5 (1.4)                 | 12.5 (1.4)                 | 12.5 (1.4)                 |

## SSRDIN/SPST, 10 - 40 Amp Rating *continued*



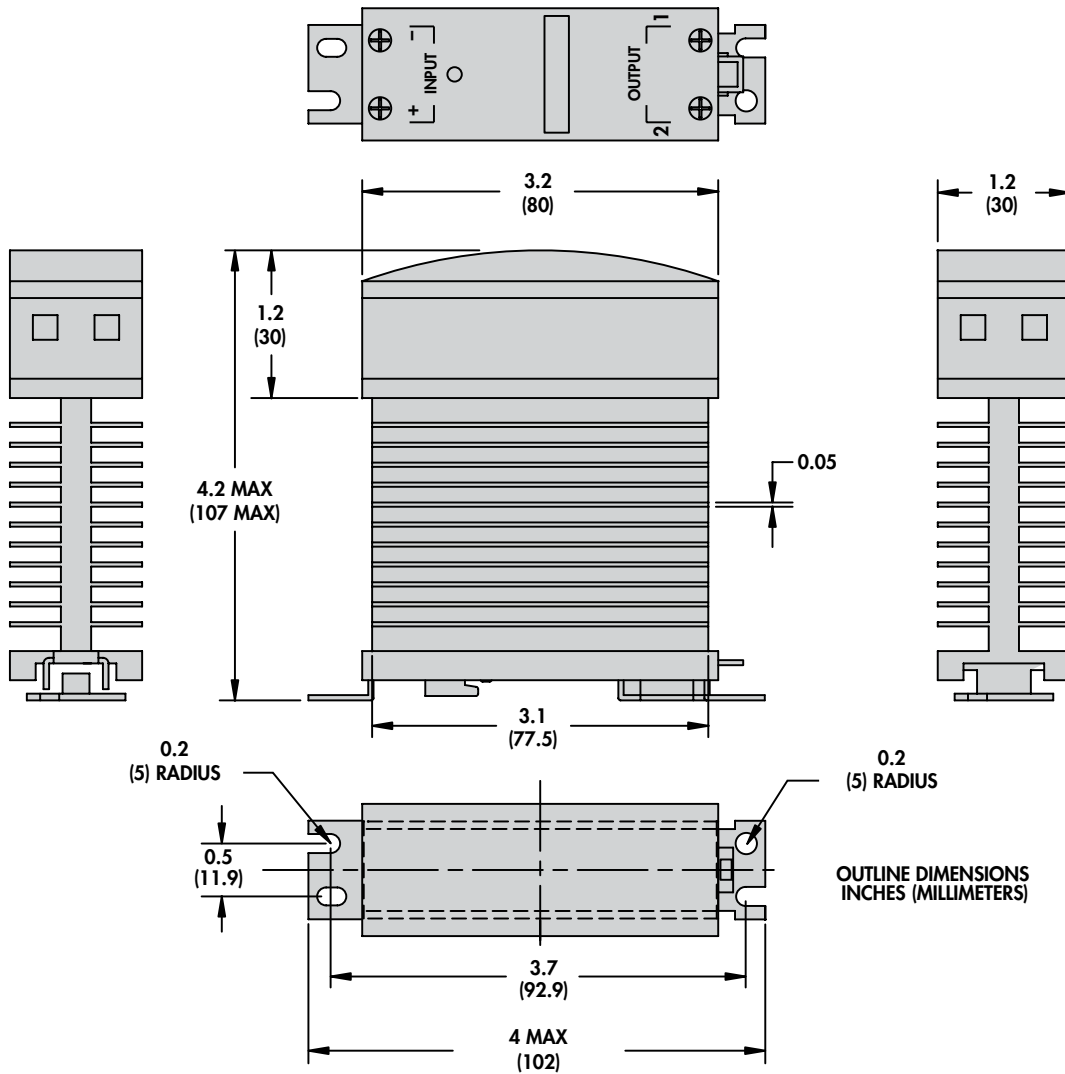
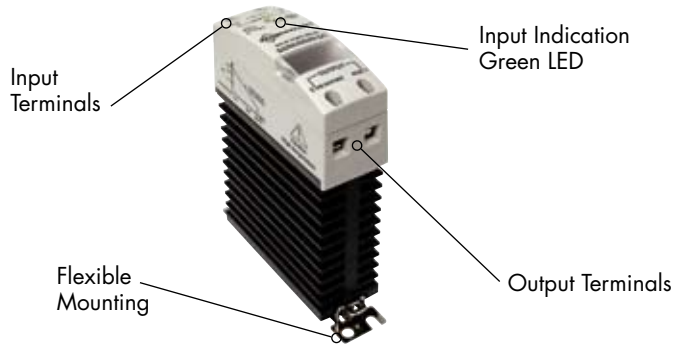
### General Specifications (@ 25° C) (UL 508)

| Output Characteristics                                |                      | Units                  | SSR210DIN-DC      | SSR225DIN-DC      |
|---|----------------------|------------------------|-------------------|-------------------|
| Number and type of Contacts                           |                      |                        | SPST-NO           | SPST-NO           |
| Switching Device                                      |                      |                        | SCR (2)           | SCR (2)           |
| Current rating  |                      | A                      | 10                | 25                |
| Switching voltage                                     |                      | V                      | 24...280 AC       | 24...280 AC       |
| Switching Type  |                      |                        | Zero Cross        | Zero Cross        |
| Maximum zero turn-on voltage (Vpk)                    |                      | V                      | 35                | 35                |
| Maximum Rate of Rise Off State Voltage (dv/dt)        |                      | V/us                   | 200               | 500               |
| Incandescent Lamp Ampere Rating (rms)                 |                      | A                      | 8                 | 16                |
| Motor Load Rating (rms)                               |                      | A                      | 4.5               | 8                 |
| Min. Load current to maintain on                      |                      | mA                     | 50                | 120               |
| Non-Repetitive Surge Current (1 cycle)                |                      | A                      | 83                | 800               |
| Max. RMS overload current (1 second)                  |                      | A                      | 24                | 40                |
| Max. Off state leakage current (rms)                  |                      | mA                     | 10                | 10                |
| Typical On State Voltage Drop (rms)                   |                      | V                      | 1.25 AC           | 1.25 AC           |
| Max. On State Voltage Drop (rms)                      |                      | V                      | 1.6 AC            | 1.6 AC            |
| Maximum I <sup>2</sup> T for Fusing (A <sup>2</sup> ) |                      |                        | 83                | 3700              |
| Input Characteristics                                 |                      |                        |                   |                   |
| Voltage Range   |                      | V                      | 3...32            | 3...32            |
| Must Release Voltage                                  |                      | V                      | 1 DC              | 1 DC              |
| Nominal Input Impedance                               |                      | Ω                      | Current Regulator | Current Regulator |
| Typical Input Current @ 5VDC or 240VAC                |                      | mA                     | 16                | 16                |
| Reverse Polarity Protection                           |                      |                        | Yes               | Yes               |
| Performance Characteristics                           |                      |                        |                   |                   |
| Operating time (response time)                        | On                   | ms                     | 8.3               | 8.3               |
|   | Off                  | ms                     | 8.3               | 8.3               |
| Rated insulation voltage                              | Input to Output      | V                      | 4000 AC           | 4000 AC           |
| Dielectric strength                                   | Terminals to Chassis | V                      | 4000 AC           | 4000 AC           |
| Environment   |                      |                        |                   |                   |
| Product certifications                                |                      |                        | UL, CSA, CE       | UL, CSA, CE       |
| Ambient air temperature around the device             | Storage              | °C                     | -40...+100        | -40...+100        |
|   | Operation            | °C                     | -30...+80         | -30...+80         |
| Degree of protection                                  |                      |                        | IP 20             | IP 20             |
| Miscellaneous Characteristics                         |                      |                        |                   |                   |
| Thermal Resistance (Junction to Case)                 |                      | °C/W                   | 1.5               | 0.43              |
| Integral Heat sink                                    |                      | °C/W                   | 2.2               | 2.2               |
| Weight  |                      | g (oz)                 | 320 (11.3)        | 326 (11.5)        |
| LED   |                      | Input                  | Green             | Green             |
| Terminal Wire Capacity                                |                      | AWG (mm <sup>2</sup> ) | 8 (10)            | 8 (10)            |
| Terminal Torque (maximum)                             |                      | in lb (Nm)             | 12.5 (1.4)        | 12.5 (1.4)        |

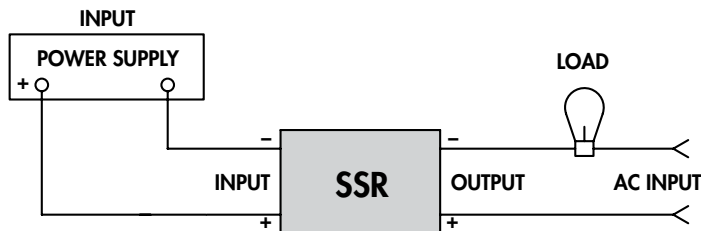


| SSR240DIN-DC      | SSR610DIN-DC      | SSR625DIN-DC      | SSR640DIN-DC      |
|-------------------|-------------------|-------------------|-------------------|
| SPST-NO           | SPST-NO           | SPST-NO           | SPST-NO           |
| SCR (2)           | SCR (2)           | SCR (2)           | SCR (2)           |
| 40                | 10                | 25                | 40                |
| 24....280 AC      | 48....600 AC      | 48....600 AC      | 48....600 AC      |
| Zero Cross        | Zero Cross        | Zero Cross        | Zero Cross        |
| 35                | 35                | 35                | 35                |
| 500               | 200               | 700               | 500               |
| 20                | 8                 | 16                | 20                |
| 14                | 4.5               | 8                 | 14                |
| 250               | 80                | 250               | 250               |
| 800               | 83                | 1000              | 800               |
| 100               | 24                | 50                | 100               |
| 10                | 10                | 10                | 10                |
| 1.6 AC            | 1.25 AC           | 1.35 AC           | 1.6 AC            |
| 1.6 AC            | 1.6 AC            | 1.6 AC            | 1.6 AC            |
| 3700              | 83                | 1700              | 3700              |
| <hr/>             |                   |                   |                   |
| 3....32           | 3....32           | 3....32           | 3....32           |
| 1 DC              | 1 DC              | 1 DC              | 1 DC              |
| Current Regulator | Current Regulator | Current Regulator | Current Regulator |
| 16                | 16                | 16                | 16                |
| Yes               | Yes               | Yes               | Yes               |
| <hr/>             |                   |                   |                   |
| 10                | 8.3               | 8.3               | 10                |
| 10                | 8.3               | 8.3               | 10                |
| 4000 AC           | 4000 AC           | 4000 AC           | 4000 AC           |
| 4000 AC           | 4000 AC           | 4000 AC           | 4000 AC           |
| <hr/>             |                   |                   |                   |
| UL, CSA, CE       | UL, CSA, CE       | UL, CSA, CE       | UL, CSA, CE       |
| -40...+100        | -40...+100        | -40...+100        | -40...+100        |
| -30...+80         | -30...+80         | -30...+80         | -30...+80         |
| IP 20             | IP 20             | IP 20             | IP 20             |
| <hr/>             |                   |                   |                   |
| 0.43              | 1.8               | 0.43              | 0.43              |
| 2.2               | 2.2               | 2.2               | 2.2               |
| 332 (11.7)        | 320 (11.3)        | 326 (11.5)        | 332 (11.7)        |
| Green             | Green             | Green             | Green             |
| 8 (10)            | 8 (10)            | 8 (10)            | 8 (10)            |
| 12.5 (1.4)        | 12.5 (1.4)        | 12.5 (1.4)        | 12.5 (1.4)        |

# SSRDIN/SPST, 10 - 40 Amp Rating *continued*



OUTLINE DIMENSIONS INCHES (MILLIMETERS)



WIRING DIAGRAM

SECTION 4

**Standard Part Numbers**

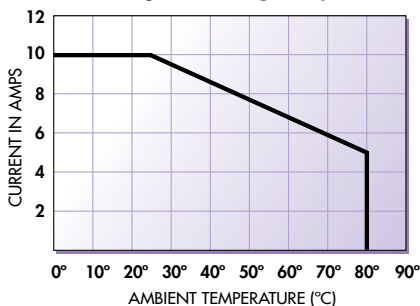
**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

| AC Operated         | Input Voltage Range | Output Voltage Range | Contact Configuration | Switching Type | Rated Current Load (Amps) |
|---------------------|---------------------|----------------------|-----------------------|----------------|---------------------------|
| <b>SSR210DIN-AC</b> | 90....280 VAC       | 24....280 VAC        | SPST-NO               | Zero Cross     | 10                        |
| <b>SSR225DIN-AC</b> | 90....280 VAC       | 24....280 VAC        | SPST-NO               | Zero Cross     | 25                        |
| SSR240DIN-AC        | 90....280 VAC       | 24....280 VAC        | SPST-NO               | Zero Cross     | 40                        |
| SSR610DIN-AC        | 90....280 VAC       | 48....600 VAC        | SPST-NO               | Zero Cross     | 10                        |
| <b>SSR625DIN-AC</b> | 90....280 VAC       | 48....600 VAC        | SPST-NO               | Zero Cross     | 25                        |
| SSR640DIN-AC        | 90....280 VAC       | 48....600 VAC        | SPST-NO               | Zero Cross     | 40                        |
| SSR210DIN-AC-2      | 90....280 VAC       | 24....280 VAC        | SPST-NO               | Random         | 10                        |
| SSR210DIN-AC-4      | 90....280 VAC       | 24....280 VAC        | SPST-NC               | Random         | 10                        |
| SSR225DIN-AC-2      | 90....280 VAC       | 24....280 VAC        | SPST-NO               | Random         | 25                        |
| SSR225DIN-AC-4      | 90....280 VAC       | 24....280 VAC        | SPST-NC               | Random         | 25                        |
| SSR610DIN-AC-2      | 90....280 VAC       | 48....600 VAC        | SPST-NO               | Random         | 10                        |
| SSR610DIN-AC-4      | 90....280 VAC       | 48....600 VAC        | SPST-NC               | Random         | 10                        |
| SSR625DIN-AC-2      | 90....280 VAC       | 48....600 VAC        | SPST-NO               | Random         | 25                        |
| SSR625DIN-AC-4      | 90....280 VAC       | 48....600 VAC        | SPST-NC               | Random         | 25                        |
| <b>DC Operated</b>  |                     |                      |                       |                |                           |
| <b>SSR210DIN-DC</b> | 3....32 VDC         | 24....280 VAC        | SPST-NO               | Zero Cross     | 10                        |
| <b>SSR225DIN-DC</b> | 3....32 VDC         | 24....280 VAC        | SPST-NO               | Zero Cross     | 25                        |
| SSR240DIN-DC        | 3....32 VDC         | 24....280 VAC        | SPST-NO               | Zero Cross     | 40                        |
| SSR610DIN-DC        | 3....32 VDC         | 48....600 VAC        | SPST-NO               | Zero Cross     | 10                        |
| <b>SSR625DIN-DC</b> | 3....32 VDC         | 48....600 VAC        | SPST-NO               | Zero Cross     | 25                        |
| SSR640DIN-DC        | 3....32 VDC         | 48....600 VAC        | SPST-NO               | Zero Cross     | 40                        |
| SSR210DIN-DC-2      | 3....32 VDC         | 24....280 VAC        | SPST-NO               | Random         | 10                        |
| SSR210DIN-DC-4      | 3....32 VDC         | 24....280 VAC        | SPST-NC               | Random         | 10                        |
| SSR225DIN-DC-2      | 3....32 VDC         | 24....280 VAC        | SPST-NO               | Random         | 25                        |
| SSR225DIN-DC-4      | 3....32 VDC         | 24....280 VAC        | SPST-NC               | Random         | 25                        |
| SSR610DIN-DC-2      | 3....32 VDC         | 48....600 VAC        | SPST-NO               | Random         | 10                        |
| SSR610DIN-DC-4      | 3....32 VDC         | 48....600 VAC        | SPST-NC               | Random         | 10                        |
| SSR625DIN-DC-2      | 3....32 VDC         | 48....600 VAC        | SPST-NO               | Random         | 25                        |
| SSR625DIN-DC-4      | 3....32 VDC         | 48....600 VAC        | SPST-NC               | Random         | 25                        |

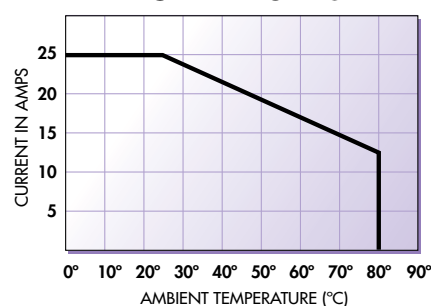
**Part Number Builder**

| Series | Output Voltage                         | Output Current | Input Voltage                              |
|--------|--|----------------|--|
| SSR    | 2 = 24 to 280 VAC<br>6 = 48 to 600 VAC | 10 = 10 AMPS   | DIN-DC = 3 - 32 VDC; SPST-NO; Zero Cross   |
|        |  | 25 = 25 AMPS   | DIN-DC-2 = 3 - 32 VDC; SPST-NO; Random     |
|        |  | 40 = 40 AMPS   | DIN-DC-4 = 3 - 32 VDC; SPST-NC; Random     |
|        |  |                | DIN-AC = 90 - 280 VAC; SPST-NO; Zero Cross |
|        |  |                | DIN-AC-2 = 90 - 280 VAC; SPST-NO; Random   |
|        |  |                | DIN-AC-4 = 90 - 280 VAC; SPST-NC; Random   |

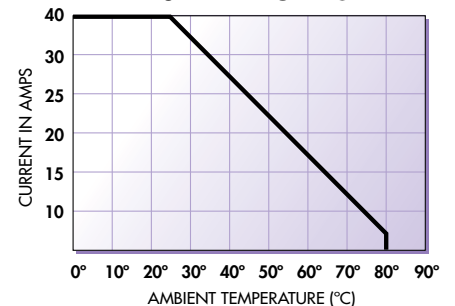
**10 AMP MODELS**



**25 AMP MODELS**



**40 AMP MODELS**



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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