



DataSheet PCB Mount

CN Series

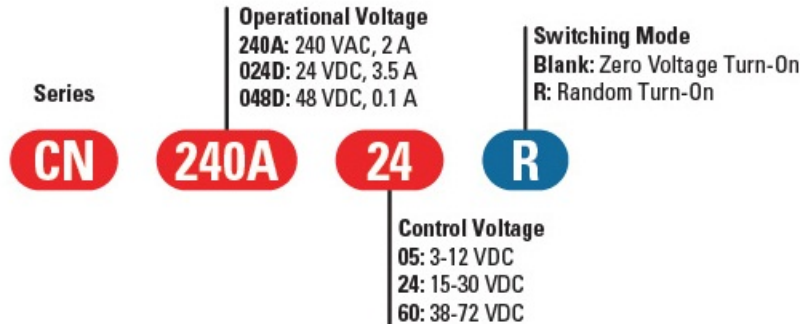


- 5mm Mini SIP SSR
- Ratings 24VDC @ 3.5A, 48VDC @ 100mA and 240VAC @ 2A
- DC Control, 5, 24 and 60V
- UL & cUL recognized @ 40°C, 100K-Cycle Endurance Test
- CE & RoHS Compliant

PRODUCT SELECTION

Control Voltage	3.5A	100mA	2A
3-12 VDC	CN024D05	CN048D05	CN240A05
15-30 VDC	CN024D24	CN048D24	CN240A24
38-72 VDC	CN024D60	CN048D60	CN240A60

AVAILABLE OPTIONS



OUTPUT SPECIFICATIONS (1)

Description	CN024Dxx	CN048Dxx	CN240Axx
Operating Voltage	0-24 VDC	0-48 VDC	24-280 VAC (47-63Hz)
Maximum Load Current @ 40°C (2)	3.5A	100mA (3)	2A
Minimum Load Current [mA]	1	1	70
Maximum Blocking Voltage	30 VDC	60 VDC	600 VAC
Maximum Surge Current [Apk]	9 (10ms)	0.3 mA (10ms)	115/120 (50/60 Hz, 1 cycle)
Maximum I ² t for fusing 50/60Hz (1/2 cycle) [A ² sec]	N.A.	N.A.	285/260
Typical On-State Voltage Drop @ Rated Current (V)	0.4	1.0	1.1 (peak)
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.001	0.001	4.0
Maximum PWM (Hz) (4)	500	500	N.A.
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] (5)	N/A	N/A	500
Switch Configuration	N.O.	N.O.	N.O.



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INPUT SPECIFICATIONS for CN024 (1)

Description	CN024D05	CN024D24	CN024D60
Control Voltage Range	3.0-12 VDC	15-30 VDC	38-72 VDC
Must Turn On Voltage	3.0 VDC	15 VDC	38 VDC
Must Turn Off Voltage	1.0 VDC	5 VDC	5 VDC
Nominal Input Impedance	500 Ohm	3.5K Ohm	20K Ohm
Typical Input Current	10mA @ 5VDC	7mA @ 24VDC	3mA @ 60VDC
Typical Turn-On Time [µsec]	120	350	400
Typical Turn-Off Time [µsec]	100	80	70

INPUT SPECIFICATIONS for CN048 (1)

Description	CN048D05	CN048D24	CN048D60
Control Voltage Range	3.0-12 VDC	16-30 VDC	38-72 VDC
Must Turn On Voltage	3.0 VDC	16 VDC	38 VDC
Must Turn Off Voltage	1.0 VDC	5 VDC	5 VDC
Nominal Input Impedance	1.25K Ohm	3.5K Ohm	20K Ohm
Typical Input Current	4mA @ 5VDC	5mA @ 24VDC	3mA @ 60VDC
Typical Turn-On Time [µsec]	20	20	20
Typical Turn-Off Time [µsec]	130	130	130

INPUT SPECIFICATIONS for CN240 (1)

Description	CN240A05	CN240A24	CN240A60
Control Voltage Range	3.0-12 VDC	15-30 VDC	38-72 VDC
Must Turn On Voltage	3.0 VDC	15 VDC	38 VDC
Must Turn Off Voltage	1.0 VDC	5 VDC (6)	5 VDC
Nominal Input Impedance	240 Ohm	3.5K Ohm	20K Ohm
Typical Input Current	15mA @ 5VDC	6mA @ 24VDC	4mA @ 60VDC
Typical Turn-On Time [msec] (7)	1/2 Cycle	1/2 Cycle	1/2 Cycle
Typical Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle	1/2 Cycle

GENERAL SPECIFICATIONS

Description	Parameters
Dielectric Strength, Input/Output (8)	2.5KV
Maximum Capacitance, Input/Output	1.5 pF
Ambient Operating Temperature Range	-20 to 80°C
Ambient Storage Temperature Range	-20 to 100°C
Weight (typical)	0.14 oz. (4.05g)
Housing Material	UL 94 V0
Overvoltage Category	III
Pollution Degree	2
Degree of protection (Encapsulation)	IP67

GENERAL NOTES

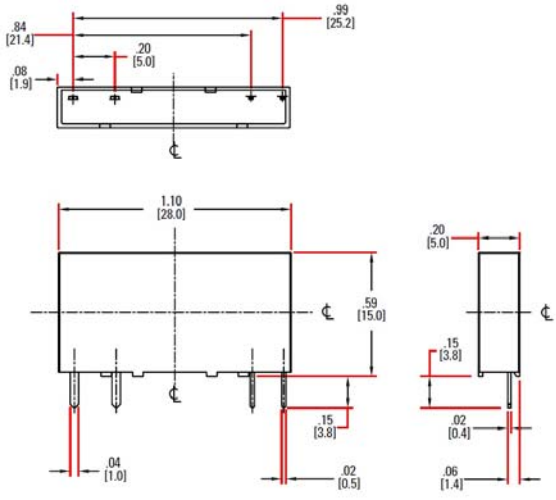
- (1) All parameters at 25°C unless otherwise specified.
- (2) See derate curves for more information
- (3) At 60°C derate by .013mA/5°C to 80°C
- (4) Operating frequency above 500Hz will damage the SSR (DC output only).
- (5) Off-state dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
- (6) For CN240A24R, must turn-off voltage is 1Vdc
- (7) Turn-on time for random turn-on version is 0.1msec.
- (8) 3.75KV for CN048Dxx



PCB Mount DataSheet

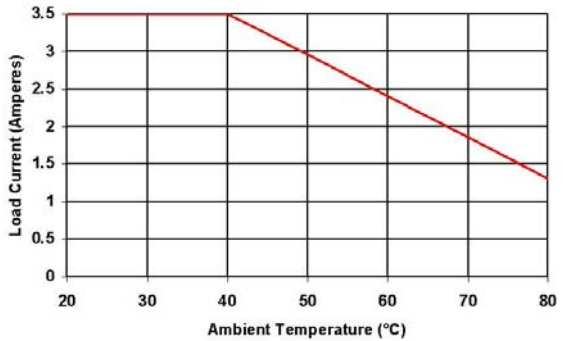
MECHANICAL SPECIFICATIONS

Tolerances: ± 0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]

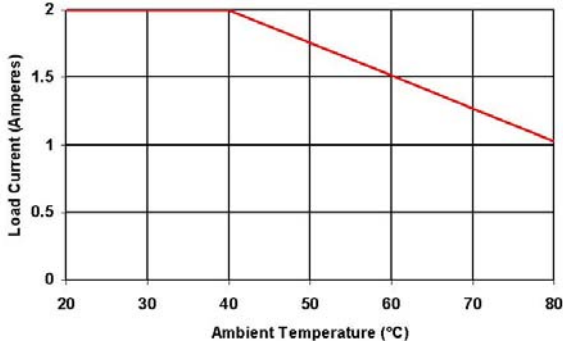


THERMAL DERATE INFORMATION

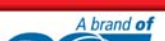
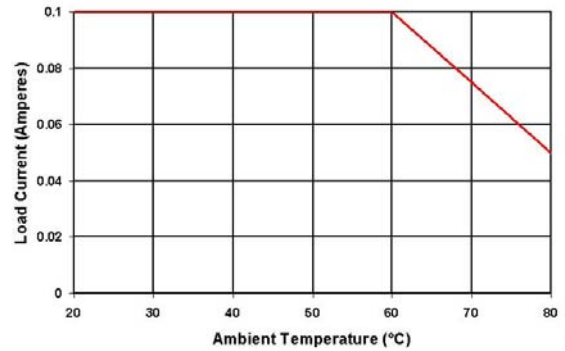
DERATE CURVES:
 CN024D - 3.5A



DERATE CURVES:
 CN240A - 2 AMP



DERATE CURVES:
 CN048D - 100mA





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AGENCY APPROVALS

Designed in accordance with the requirements of IEC 62314



ACCESSORIES

Rev. 072312

DRSCN Series DIN Rail Mountable Sockets

DRSCN05, DRSCN24



- Sockets are fully compatible with CN series SSRs
- 6.2 mm wide
- Yellow LED status indicator
- Socket clip fits all standard 35 mm DIN rail profiles
- UL & cUL recognized, CE & RoHS compliant

RELAY/SOCKET COMPATIBILITY ^(G, H)

SSR PN	DR Socket PN	Socket Input Voltage
CN024D05 CN048D05 CN240A05	DRSCN05	5 VDC
CN024D24 CN048D24 CN240A24	DRSCN24	24 VDC

^(G) Installing a CN Series solid state relay in a socket that does not have matching input/output specifications may result in non-operation or damage to either the relay, socket or both.

^(H) Maximum output rating for DRSCN Series sockets is 250 V / 6 Amps regardless of chosen SSR.

ID Marker Strips

CNLB, CNLN, CNL2



Blank Strips

Part no.: CNLB

A package of 10 plastic strips comprising 10 individual unprinted markers which can be placed on sockets' terminal block for easy identification during the use of multiple units.



Numbered 1 to 10 Strips

Part no.: CNLN

A package of 10 plastic strips comprising 10 markers printed individually from 1 to 10 which can be placed on sockets' terminal block for easy identification during the use of multiple units.



Numbered 11 to 20 Strips

Part no.: CNL2

A package of 10 plastic strips comprising 10 markers printed individually from 11 to 20 which can be placed on sockets' terminal block for easy identification during the use of multiple units.

Each strip Part no. comes in a bag of 100 pcs.

