

| LS SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- SIP SSR
- Ratings up to 12 A @ 280 VAC
- DC control
- Zero voltage turn-on (resistive loads) or instantaneous turn-on (inductive loads) output

PRODUCT SELECTION

Control Voltage	8 A	12 A
4-10 VDC	LS240D8	LS240D12
20-28 VDC	LSE240D8	LSE240D12

OUTPUT SPECIFICATIONS ^(A)

Description	LS240D8	LS240D12
Operating Voltage (47-63 Hz) [Vrms]	24-280	24-280
Transient Overvoltage [Vpk]	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mA _{rms}]	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ^(B)	500	500
Maximum Load Current [A _{rms}] ^(C)	8	12
Minimum Load Current [A _{rms}]	0.15	0.15
Maximum Surge Current (16.6 msec) [A _{pk}]	80	120
Maximum On-State Voltage Drop @ Rated Current [Vrms]	1.6	1.6
Thermal Resistance Junction to Case (R _{jc}) [°C/W]	2.2	2.0
Minimum Power Factor (with Maximum Load)	0.5	0.5

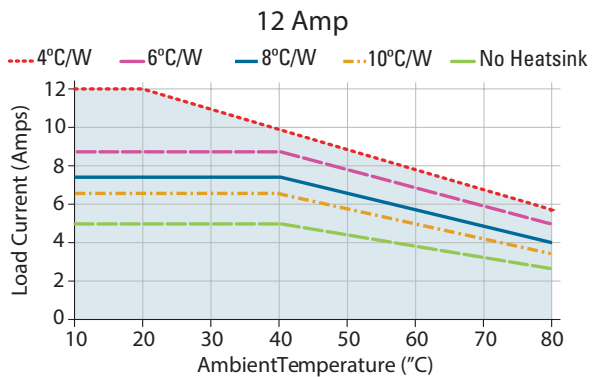
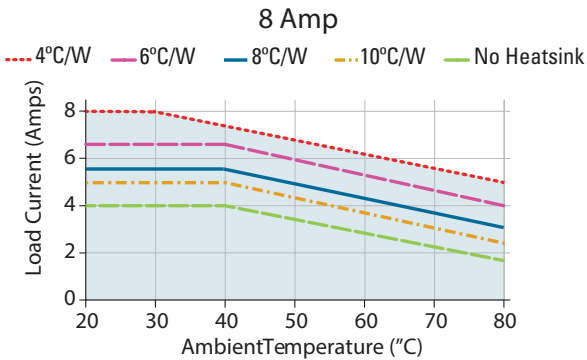
● INPUT SPECIFICATIONS^(A)

Description	LS	LSE
Control Voltage Range	4-10 VDC	20-28 VDC
Must Turn-On Voltage	4.0 VDC	20 VDC
Must Turn-Off Voltage	1.0 VDC	1.0 VDC
Typical Input Current @ Nominal Voltage	15 mA	15 mA
Minimum Input Current	7.0 mA	7.0 mA
Nominal Input Impedance	270 Ohms	1500 Ohms
Nominal Input Impedance	Current Regulated	Current Regulated
Maximum Turn-On Time [msec]	1/2 cycle	1/2 Cycle
Maximum Turn-Off Time [msec]	1/2 Cycle	1/2 Cycle

● GENERAL SPECIFICATIONS^(A)

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	10 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 125°C
Weight (typical)	0.6 oz (17 g)
Encapsulation	Thermally Conductive Epoxy

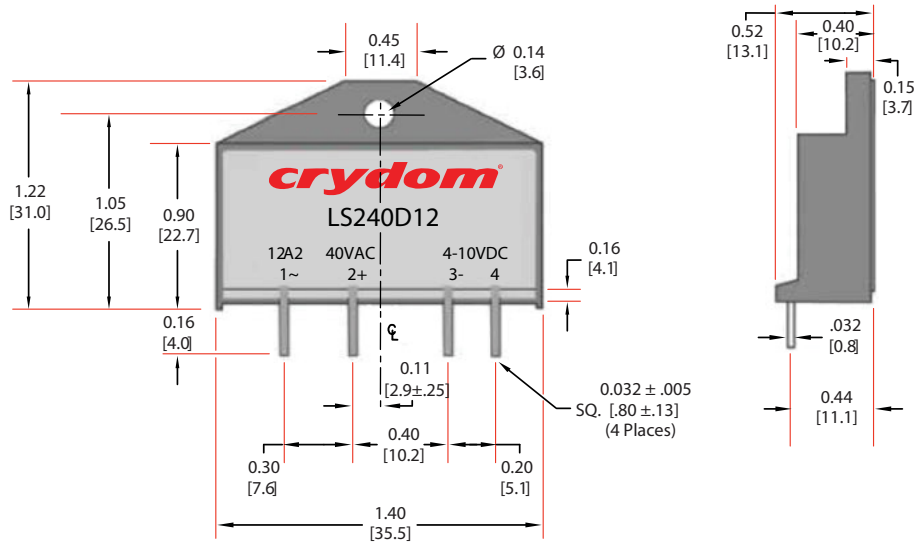
● THERMAL DERATE INFORMATION



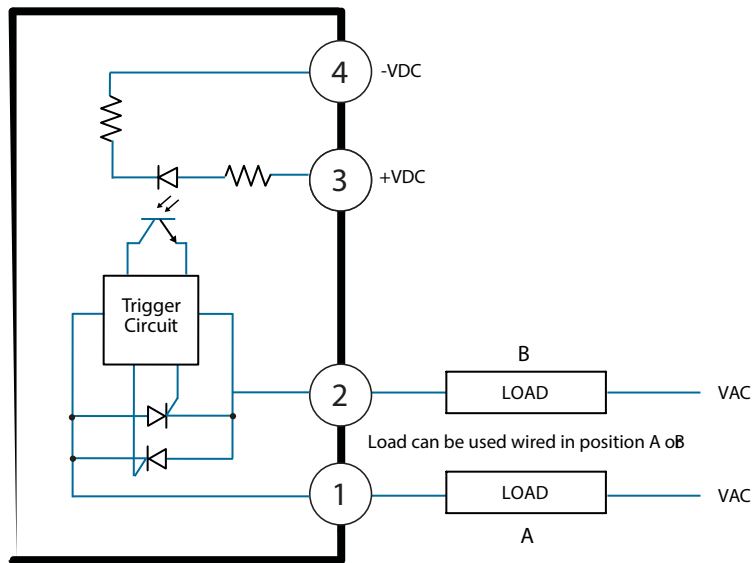
MECHANICAL SPECIFICATIONS

Tolerances: ± 0.02 in / 0.5 mm

All dimensions are in inches [millimeters]



EQUIVALENT CIRCUIT BLOCK DIAGRAM/WIRING DIAGRAM



ORDERING OPTIONS

Example : LSE240D12R

Series	LS	E	240	D	12	R
LS						
Control Voltage						
Blank: 4-10 VDC E: 20-28 VDC						
Operating Voltage						
240: 24-280 VAC						
Control Voltage						
D: DC Input						
Rated Load Current						
8: 8 Amps 12: 12 Amps						
Switching Mode						
Blank: Zero voltage turn-on R: Instantaneous turn-on						

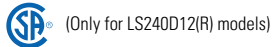
— Required for valid part number
□ For options only and not required for valid part number

GENERAL NOTES

- (1) All parameters at 25 °C unless otherwise specified
- (2) Off-State dv/dt test method per EIA/NARM standard RS-443. paragraph 13.11.1
- (3) See current derating curve

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



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