

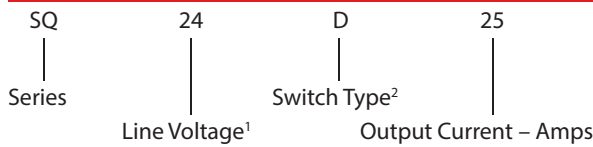
FEATURES/BENEFITS

- Four independently controlled solid-state relays in an industry standard package.
- Tight zero-cross window for low EMI
- Constant current input for low current draw
- Faston terminals
- High-power switching
- Optical isolation ensures complete protection of the control circuit from load transients
- Heating & motor control, industrial & process controls, on/off control of AC equipment
- UL recognized (UL File Number: E128555)



Part Number	Description
SQ24D25	25A, 240 Vac Solid-State Relay
SQ24R25	25A, 240 Vac Solid-State Relay
SQ24R25-02	25A, 240 Vac Solid-State Relay

Part Number Explanation



NOTES

- 1) Line Voltage (nominal): 24 = 240 Vac
- 2) Switch Type: D = Zero-cross turn-on; R = Random turn-on
- 3) Control LED model available. Contact factory.

ELECTRICAL SPECIFICATIONS
(+25°C ambient temperature unless otherwise specified)

INPUT (CONTROL) SPECIFICATIONS

	Min	Max	Units
Control Range			
SQ24D25	3	32	Vdc
SQ24R25	4	40	Vdc
Input Current Range	See Figure 2		
Typical Turn-On Voltage	4.3		Vdc
Must Turn-Off Voltage	1		Vdc
Reverse Voltage	32		Vdc

CONTROL CHARACTERISTIC

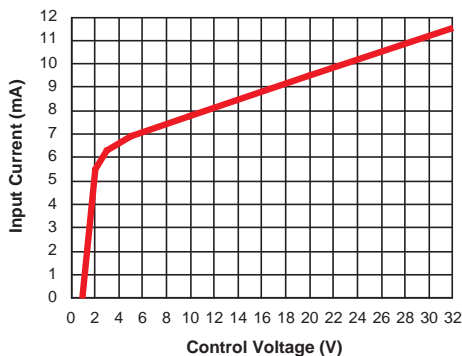
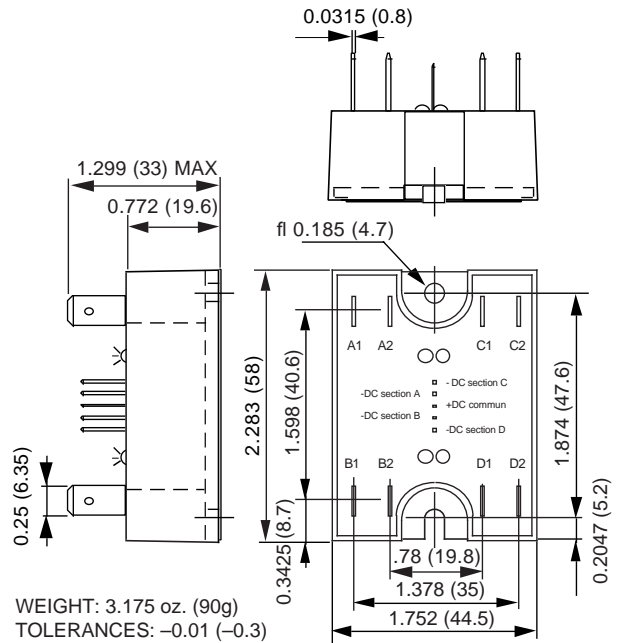


Figure 2

MECHANICAL SPECIFICATION



WEIGHT: 3.175 oz. (90g)
TOLERANCES: -0.01 (-0.3)

Figure 1

TYPICAL APPLICATION

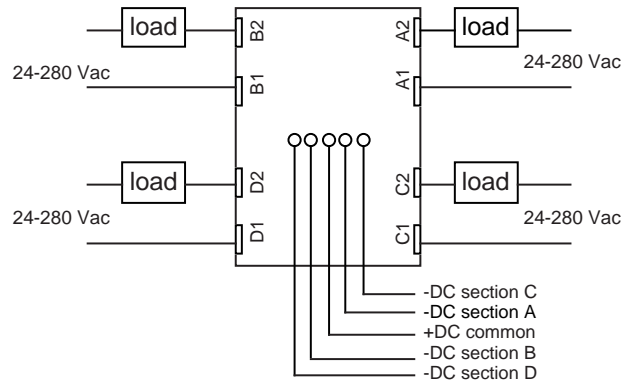


Figure 3

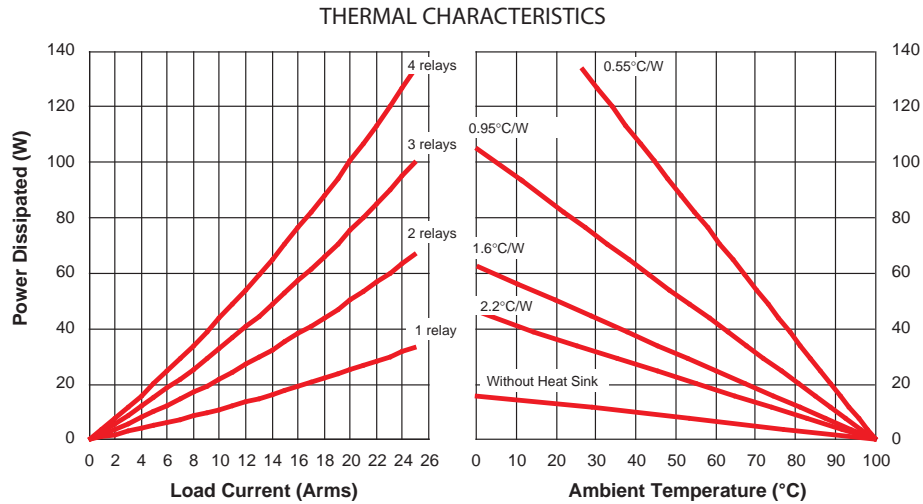


Figure 4

ELECTRICAL SPECIFICATIONS

(+25°C ambient temperature unless otherwise specified)

OUTPUT (LOAD) SPECIFICATIONS

	Min	Max	Units
Operating Range	12	280	Vrms
Peak Voltage		600	Vpeak
Load Current Range (See Figure 4)	.005	25	Arms
Maximum Surge Current Rating (Non-repetitive, see Figure 5)		240	A
On-State Voltage Drop		1.2	V
Zero-Cross Window		±25	V
Off-State Leakage Current (60Hz)		0.5	mA
Turn-On Time			
SQ24D25		8.3	ms
SQ24R25		0.1	ms
Turn-Off Time		8.3	µs
Off-State dv/dt		500	V/µs
Operating Frequency Range	47	440	Hz
I ² t for Match Fusing (<8.3ms)		288	A ² s

SURGE CURRENT

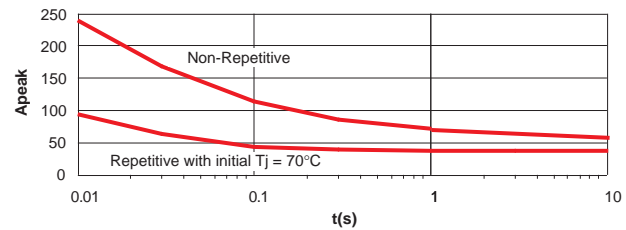


Figure 5

NOTES

1. Electrical specifications at 25°C unless otherwise noted.
2. Control LED models available. Contact factory.
3. For 800Hz applications, contact factory.
4. For additional/custom options, contact factory.

OPTIONAL ADD-ONS

- Please order add-ons separately:
- -12 — Thermal pad installed

GENERAL SPECIFICATIONS

(+25°C ambient temperature unless otherwise specified)

ENVIRONMENTAL SPECIFICATIONS

	Min	Max	Units
Operating Temperature	-40	+100	°C
Storage Temperature	-40	+100	°C
Input-Output Isolation	4000		Vrms
Output-Case Isolation	2500		Vrms
Rated Impulse Voltage	4000		V

Mouser Electronics

Authorized Distributor

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