RELAY

MINIATURE POWER RELAY-TYPE RPS

R SERIES

INTRODUCTION:
Adam Tech RPS relays are modern PCB low power relays. Sometimes known as 'Sugar Cube' relays, these small relays can switch loads up to 10 amps. They are available in 1 form A, and 1 form C contact formats within a sealed package. These relays are popular in applications such as small appliances, vending machines, and office equipment.

FEATURES:
10 Amp switching capability
Power consumption of 360mW
Sealed construction.

SPECIFICATIONS:

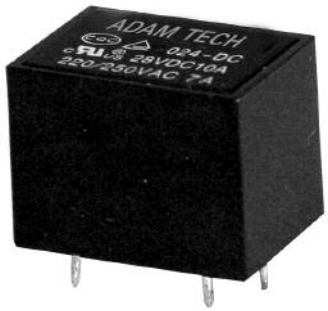
ELECTRICAL:
Contact arrangement: 1 Form A & 1 Form C
Contact material: Silver Alloy
Contact Rating (Resistive load): 7A and 10A @ 250V AC
10A @ 30V DC
Max. Switching Voltage: 250V AC / 30V DC
Max. Switching Power: 2500VA / 300W
Contact resistance: 50 mΩ max. Initial
Insulation resistance: 100 MΩ min. @ 500V DC
Dielectric withstanding voltage:
Between Coil & Contact: 1500V AC 50/60Hz for 1 min.
Between Contacts: 1000V AC 50/60Hz for 1 min.
Operating time: 10 ms max.
Release time: 5 ms max.
Electrical Life: 100,000 Operations (at rated load)

MECHANICAL:
Vibration resistance (Endurance): 1.5mm Double Amplitude 10-55Hz
Shock resistance: 10G min.
Mechanical Life: 10,000,000 Operations (no load)

TEMPERATURE RATING:
Ambient temperature: -40°C to +85°C

PACKAGING:
Anti-ESD plastic trays or tubes

SAFETY AGENCY APPROVALS:
cUL Recognized File No. E305638



ORDERING INFORMATION

MINIATURE POWER RELAY

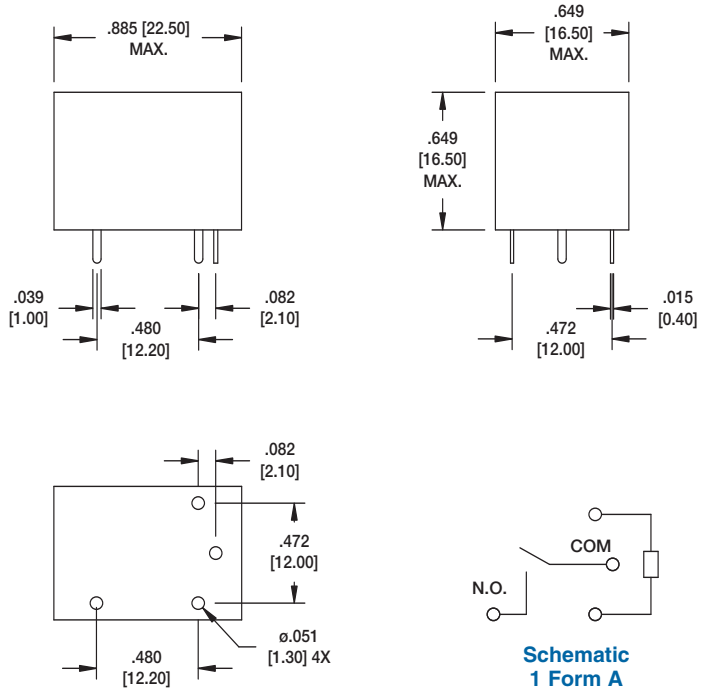
RPS — **1C** — **12**

SERIES INDICATOR
RPS = Miniature Power Relay

CONTACT FORM
1A = 1 form A
1C = 1 form C

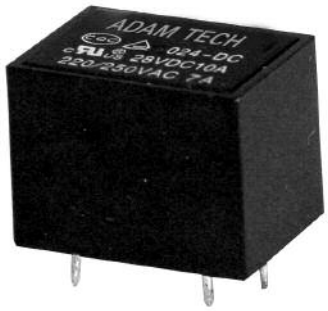
COIL VOLTAGE
5 = 5V DC
6 = 6V DC
12 = 12V DC
24 = 24V DC
48 = 48V DC

RPS-1A-X



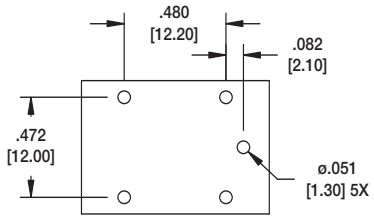
Recommended PCB Layout
1 Form A

Schematic
1 Form A

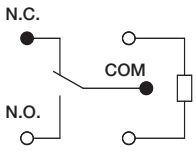


RPS-1A-24

RPS-1C-X



Recommended PCB Layout
1 Form C



Schematic
1 Form C

Nominal Voltage V DC	Pick-up Voltage V DC (max.)	Drop-out Voltage V DC (min.)	Nominal Operating Current mA (±10%)	Coil Resistance (±10%)	Nominal Operating Power mW	Max allowable Voltage V DC
5	3.5	0.5	72	69.4	360	130%V of nominal Voltage
6	4.2	0.6	60	100		
12	8.4	1.2	30	400		
24	16.8	2.4	15	1,600		
48	33.6	4.8	7.5	6,400		