

### 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:

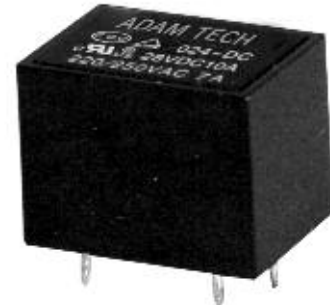
Ambient temperature: -40°C to +85°C

#### PACKAGING:

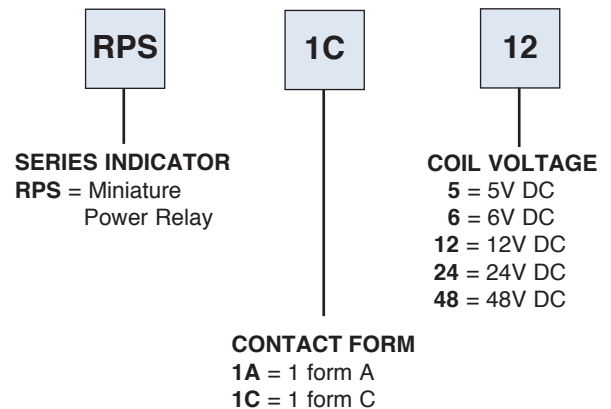
Anti-ESD plastic trays or tubes

#### SAFETY AGENCY APPROVALS:

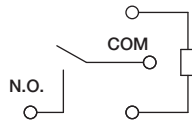
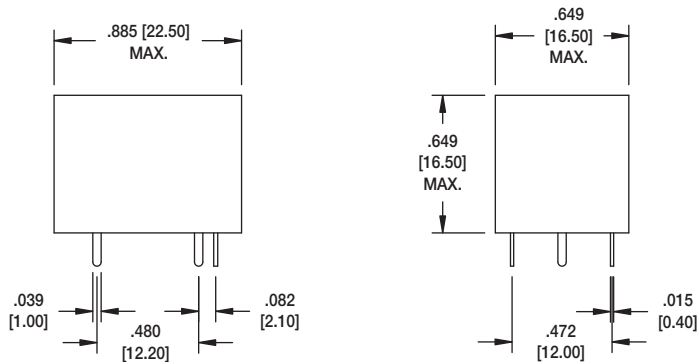
UL Recognized & CSA Certified, File no. E305638



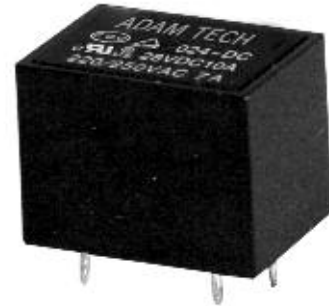
### ORDERING INFORMATION MINIATURE POWER RELAY



#### RPS-1A-X



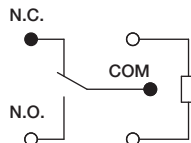
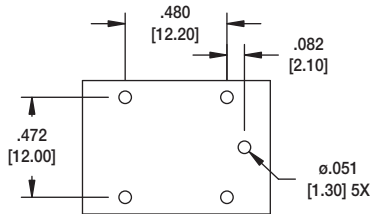
**Schematic  
1 Form A**



**RPS-1A-24**

**Recommended PCB Layout  
1 Form A**

#### RPS-1C-X



**Schematic  
1 Form C**

**Recommended PCB Layout  
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		