

## General Purpose PCB Relay, 12A



### DESCRIPTION

General Purpose single pole Signal/Power Relays. These general purpose, low profile, single pole, through hole mounting relays are designed for switching control signals within circuits.

### DISTINCTIVE FEATURES

- Low Profile
- Fully Sealed Construction
- SPST-NO, SPDT Contact Configuration
- Contact Form: 1 Form A and 1 Form C
- 3.5 and 5mm pitch
- Sensitivity: 400mW
- PCB Mounting

### APPLICATIONS

These relays are suitable for a wide range of applications including automation control, automotive electronics, audio amplification, and industrial equipment.

**12A**

**1 Form A**

**1 Form C**

**3.5mm Pitch**

**5.0mm Pitch**

**440V AC**

**120V DC**





## ELECTRICAL SPECIFICATION

Contact Form	1 Form A, 1 Form C (See Part Number Table)	
Contact Rating	Resistive	12A 250VAC/30VDC
	Inductive	5A 250VAC Cosφ=0.4
Contact Resistance	Maximum	100mΩ (6VDC 1A)
Insulation Resistance	Minimum	1000MΩ 500VDC
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	5,000VAC, 1min
Load	Maximum Switching Voltage	440VAC/120VDC
	Maximum Switching Current	12A
	Maximum Switching Power	3,000VA, 360W
	Minimum Switching Load	5VDC, 100mA

### Coil Data

Ambient Temperature: 23°C

Part number	Nominal Voltage VDC	Coil Resistance Ω+/-10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
<b>61-6292</b>	12	360	8.4	1.2	400



## GENERAL SPECIFICATION

Series	General purpose signal/power relays
Mounting Type	PCB mounting
RoHS	Yes



## MATERIALS

Contact Material	Ag Alloy
Outer Case Material	PBT Plastic sealed



## CERTIFICATION AND STANDARDS

File Number	Contact Form	Power Consumption	Coil Voltage	Contact rating	Remarks
UL E164730	A/C	0.4W	5-110VDC	12A 250VAC	Class F insulation Ambient Temperature: 85°C
TUV 50097843	A/C	0.4W	5-48VDC	12A 250VAC	Ambient Temperature: 85°C
CQC09002030014 (GB/T 21711.1-2008)	A/C	0.4W	5, 6, 9, 12, 24, 48, 60, 110VDC	12A 250VAC	Ambient Temperature: 85°C
VDE 40043990	A/C	0.4W	5, 6, 9, 12, 18, 24, 36, 48VDC	12A 250VAC	Ambient Temperature: 85°C

Specifications subject to change without notice.



## ENVIRONMENTAL/OPERATING SPECIFICATION

Life	Electrical Life	100,000 operations
		50,000 operations (Inductive: $\cos\phi=0.4$ , L/R=7ms)
	Mechanical Life	20,000,000 operations
Operate Time	Maximum 10ms	
Release Time	Maximum 5ms	
Operating Temperature	-40°C to +85°C	
Humidity	35~95%RH, +40°C	
Shock Resistance	Endurance	1,000m/s <sup>2</sup>
	Misoperation	100m/s <sup>2</sup>
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude



## TERMINALS

Terminal Type	Solder Pins
Terminal Dimensions	See drawing on page 4 and 5



## DIMENSIONS/DRAWINGS

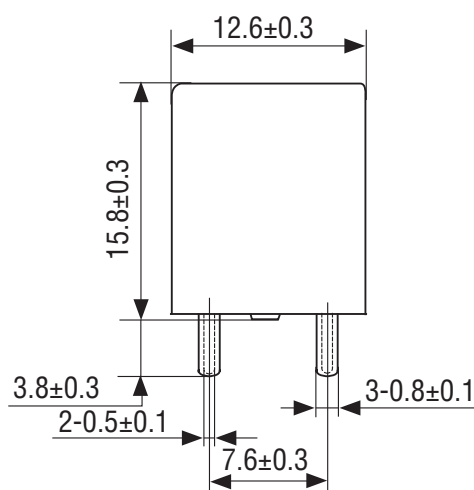
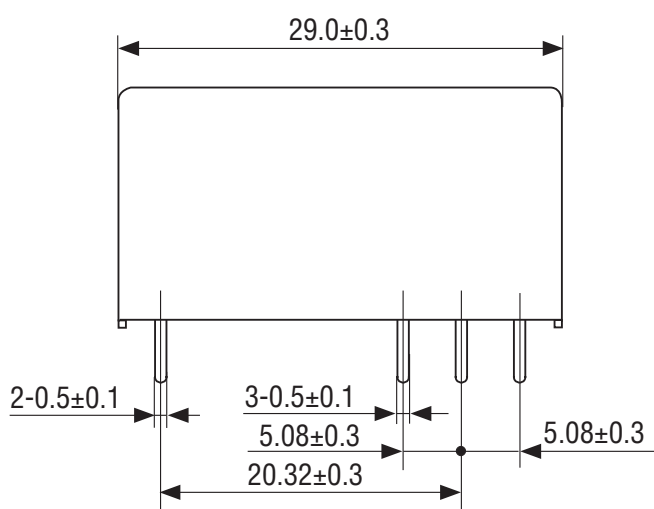
Units	mm - unless stated otherwise
Dimensions (Summary)	29.0 x 12.6 x 15.8mm
Length	29.0mm
Width	12.6mm
Height (Excluding pins)	15.8mm
Weight	13.0g (approx.)



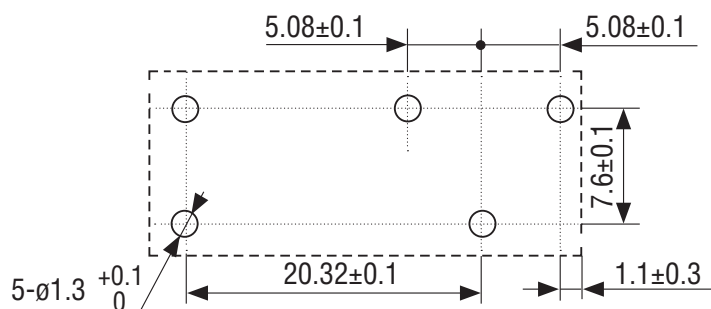
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

### 1 Form C

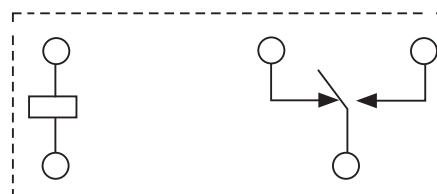
### Outline (5mm)



Mounting Hole Layout  
(Bottom View)

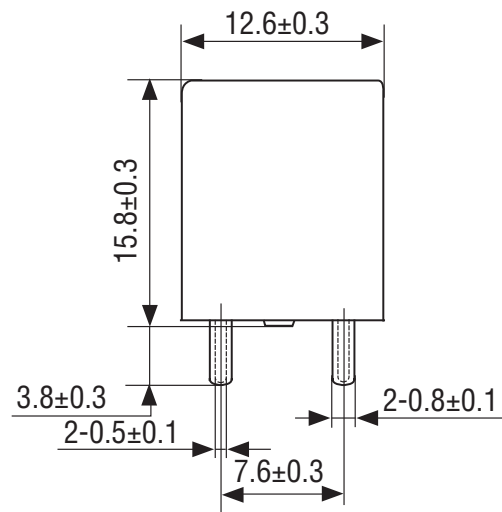
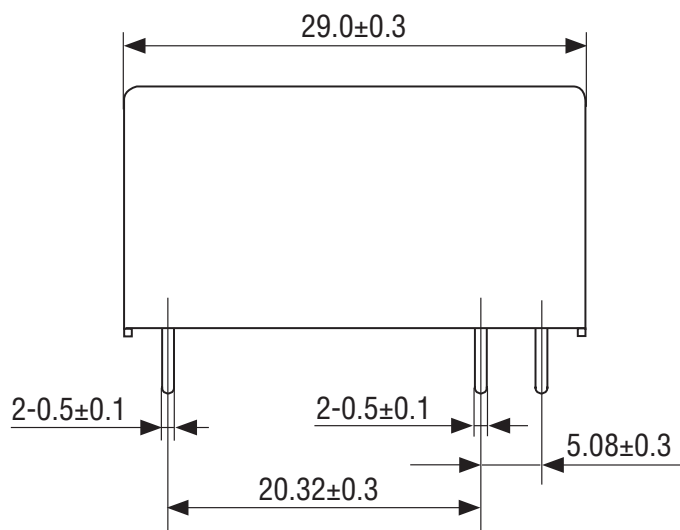


Wiring Diagram  
(Bottom View)

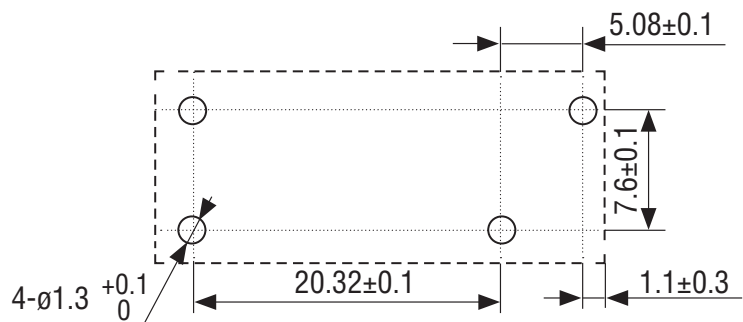


## 1 Form A

## Outline (5mm)



## Mounting Hole Layout (Bottom View)



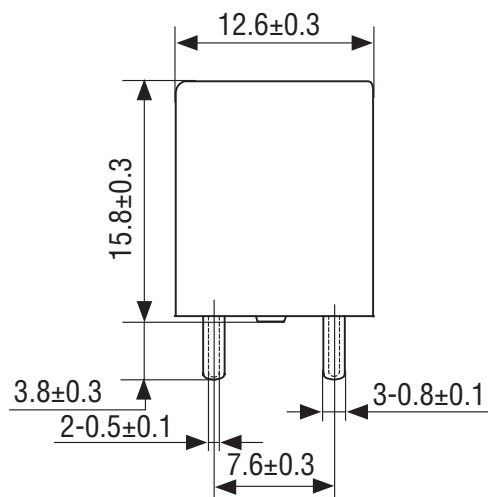
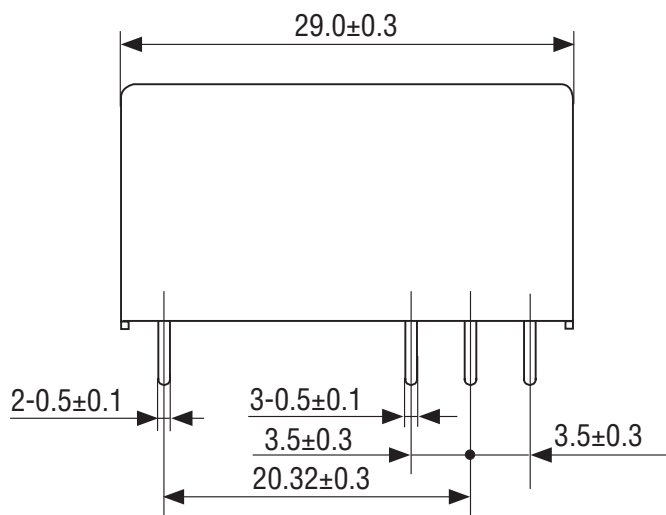
## Wiring Diagram (Bottom View)



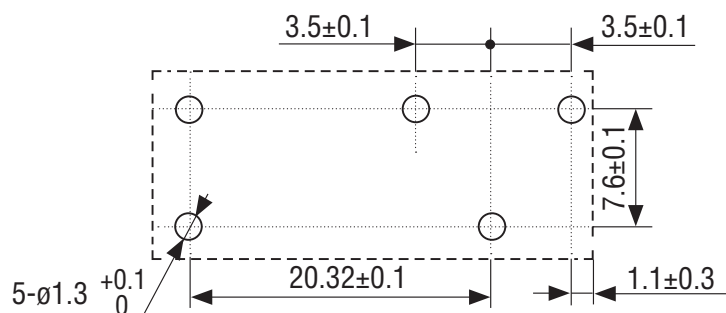
## OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

### 1 Form C

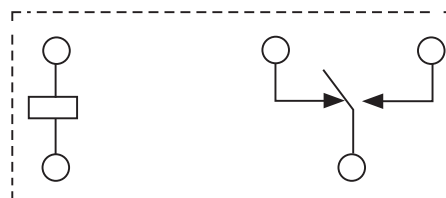
### Outline (3.5mm)



Mounting Hole Layout  
(Bottom View)

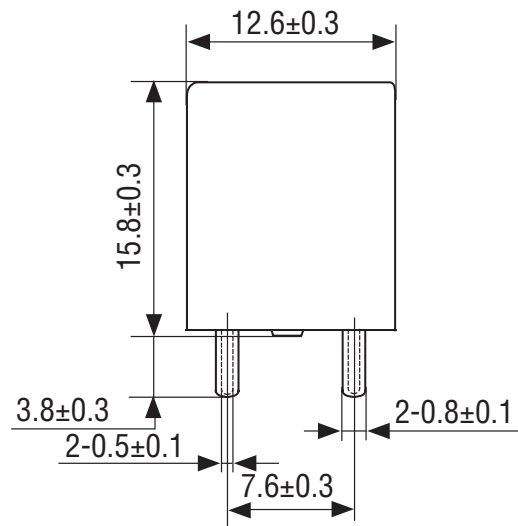
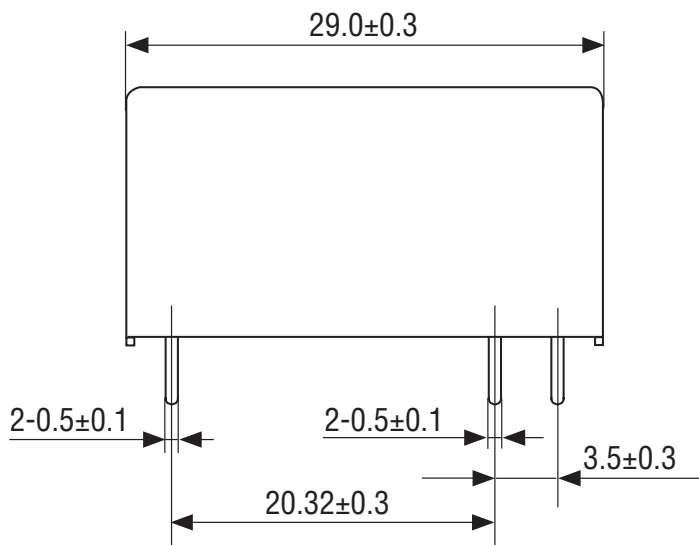


Wiring Diagram  
(Bottom View)

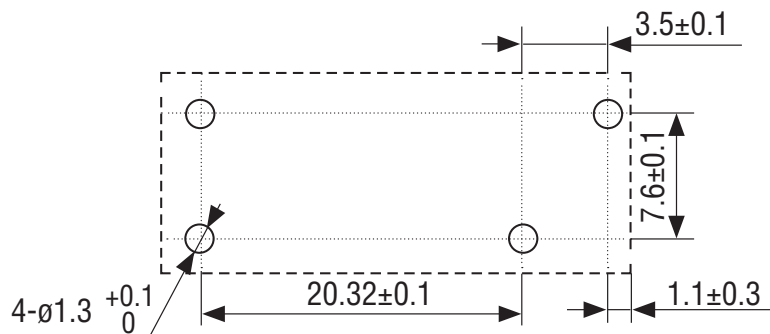


# 1 Form A

## Outline (3.5mm)



## Mounting Hole Layout (Bottom View)

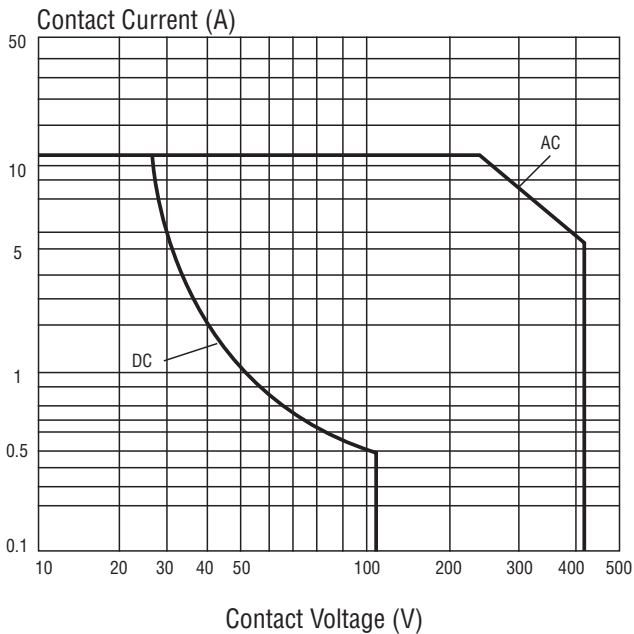


## Wiring Diagram (Bottom View)

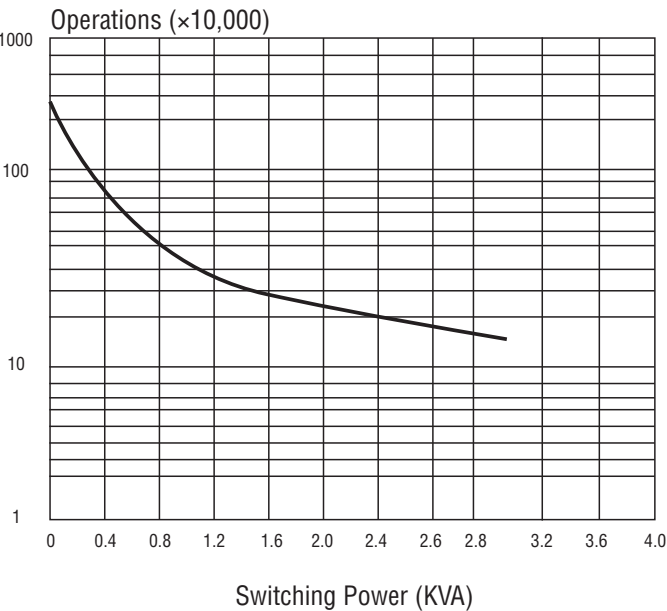


# REFERENCE DATA

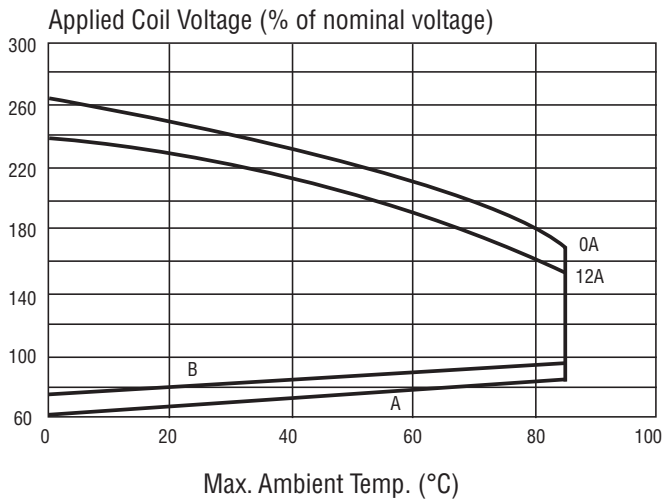
Maximum Switching Power



Life Curves



Max. Ambient Temp. Vs. Coil Voltage



A: Coil temperature = Ambient temperature.  
 B: 110% of nominal coil voltage at rated contact load.



## OPTIONS (MOQ may apply)

Coil Voltage	5, 6, 9, 12, 24, & 48V
Contact Form	1 Form A
Contact Configuration	SPST-NO
Enclosure	Plastic Sealed Type
Pitch	3.5 and 5mm



## PART NUMBER TABLE

Part number	Nominal Coil Voltage	Contact Form	Pitch	Enclosure	UNSPSC	EAN	Country of Origin
<b>61-6292</b>	12 VDC	1 Form C	5mm	Sealed	39122325	5053556018710	China

For further information on pricing, delivery, and long-term stock agreements please get in touch with your local business development contact, telephone our main office on **01206 838000** or email **Sales@Rapidonline.com**.



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