

## High Sensitivity PCB Relay, 10A



### DESCRIPTION

High Sensitivity Miniature single pole Relays. These high sensitivity, miniature, single pole, through hole mounting relays are designed for switching control signals within circuits.

### DISTINCTIVE FEATURES

- High Sensitivity
- Miniature Size
- Fully Sealed Construction
- Contact Form: 1 Form A, 1 Form B, 1 Form C
- SPDT, SPST-NO, SPST-NC Contact Configuration
- PCB Mounting

### APPLICATIONS

The small dimensions of these miniature high sensitivity relays make them suitable for a wide range of applications including automotive electronics, automation control, measurement, and industrial equipment.

10A

1 Form  
A

1 Form  
B

1 Form  
C

250V  
AC

28V  
DC



## ELECTRICAL SPECIFICATION

Contact Form	1 Form A, 1 Form B, 1 Form C (See Part Number Table)	
Contact Rating	A: 15A 125VAC, 10A 250VAC NO: 10A 250VAC/24VDC NC: 6A 250VAC/24VDC TV-5 125VAC	
Contact Resistance	Maximum	100mΩ (6VDC 1A)
Insulation Resistance	Minimum	1000MΩ 500VDC
Load	Maximum Switching Voltage	250VAC/28VDC
	Maximum Switching Current	15A
	Maximum Switching Power	2,500VA, 280W
	Minimum Switching Load	5VDC, 100mA
Dielectric Strength	Between open contacts	750VAC, 1 minimum
	Between coil and contacts	1,500VAC, 1 minimum

### 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>61-6305</b>	5	70	3.5	0.5	360
<b>61-6297</b>	12	400	8.4	1.2	360
<b>61-6298</b>	24	1600	16.8	2.4	360



## GENERAL SPECIFICATION

Series	Miniature High Sensitivity 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
CQC 08002027614 (GB/T 21711.1-2008)	A	0.36W/0.45W	3-48VDC	10A 250VAC	Ambient Temperature: 85°C
				15A 250VAC	Ambient Temperature: 65°C
				16A 250VAC	Ambient Temperature: 40°C
	B	0.36W/0.45W	3-48VDC	6A 250VAC	Ambient Temperature: 85°C
C	0.36W/0.45W	3-48VDC	NO/NC: 10A/6A 250VAC	Ambient Temperature: 85°C	
TUV 50116136	A/B/C	0.36W/0.45W	3-48VDC	NO/NC: 10A/6A 250VAC	Ambient Temperature: 105°C
TUV 50116136 (EN 60730-1)				NO: 10(2)A 250VAC NC: 6(1)A 250VAC	Ambient Temperature: 105°C
TUV 50116136-005	A	0.36W	3-48VDC	15A 250VAC	Ambient Temperature: 65°C
UL E164730	A	0.36W/0.45W	3-48VDC	15A 125VAC	Class F Insulation Ambient Temperature: 65°C
		0.36W	3-48VDC	16A 125VAC	Class F Insulation Ambient Temperature: 105°C
	C	0.36W/0.45W	3-48VDC	10A 120VAC/28VDC	Class F Insulation Ambient Temperature: 105°C
				10A 277VAC	Class F Insulation Ambient Temperature: 105°C
				TV-5 125VAC	Class F Insulation Ambient Temperature: 105°C
				10A 250VAC	Class F Insulation Ambient Temperature: 105°C
	A/C	0.36W/0.45W	3-48VDC	1/2HP 120VAC	NDLX Category (N.O. Contact side)
1/2HP 240VAC					
CSA 1063016 (LR 109368)	A/C	0.36W/0.45W	3-48VDC	10A 120VAC/24VDC	-
Explosion-proof Certificate CNEEx16.3131U	A	0.36W	12VDC	10A 250VAC	Mark: Ex nC IIC Gc

Specifications subject to change without notice.



## ENVIRONMENTAL/OPERATING SPECIFICATION

Life	Electrical Life	100,000 operations
	Mechanical Life	10,000,000 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 5, 6 and 7



## DIMENSIONS/DRAWINGS

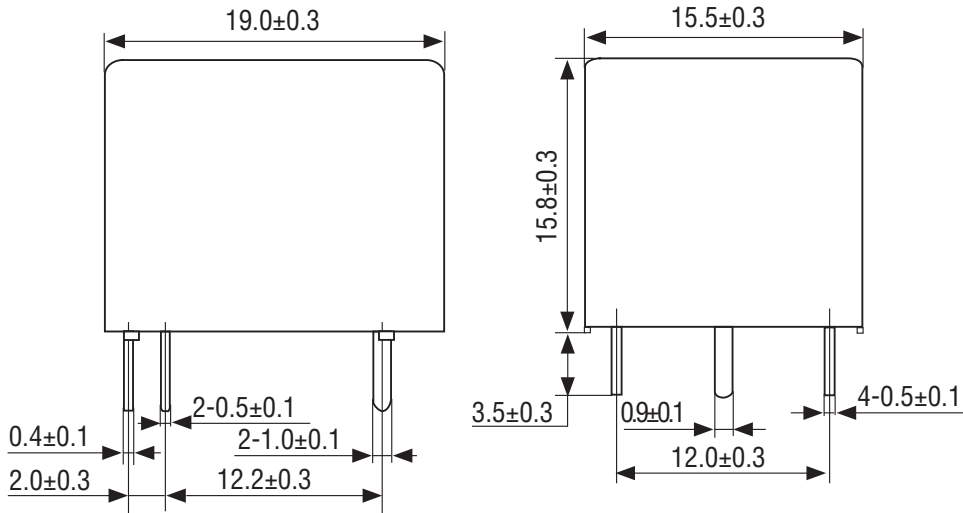
Units	mm - unless stated otherwise
Dimensions (Summary)	19.0 × 15.5 × 15.8
Length	19.0
Width	15.5
Height (Excluding pins)	15.8
Weight	10g (approx.)



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

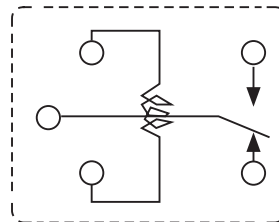
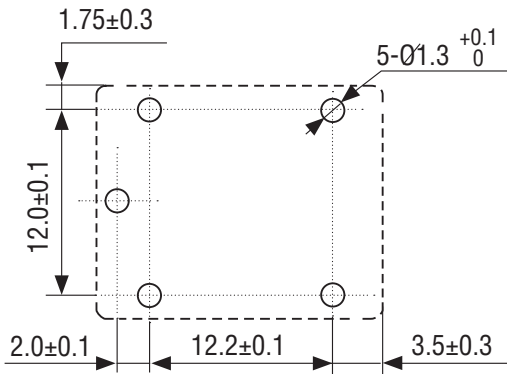
### 1 Form C

### Outline

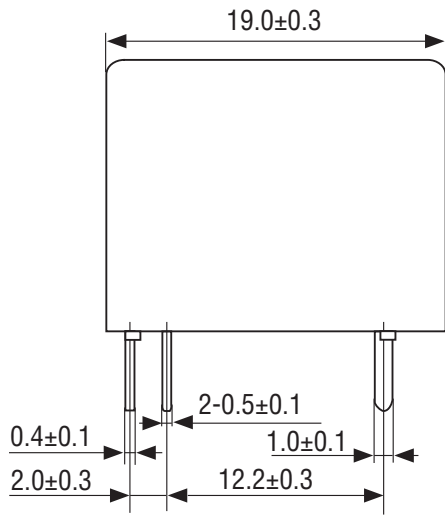


Mounting Hole Layout  
(Bottom View)

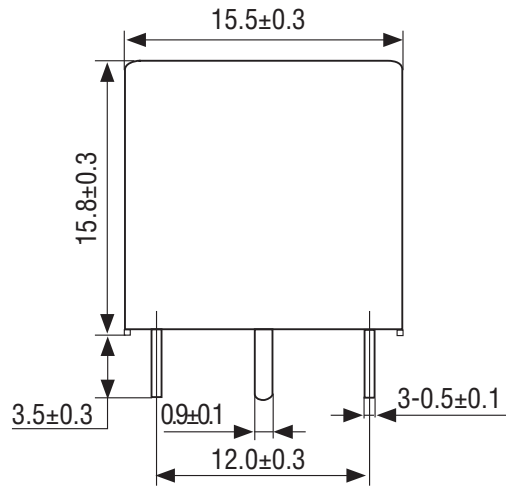
Wiring Diagram  
(Bottom View)



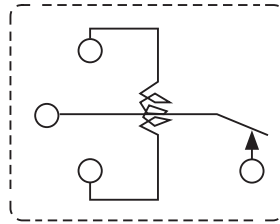
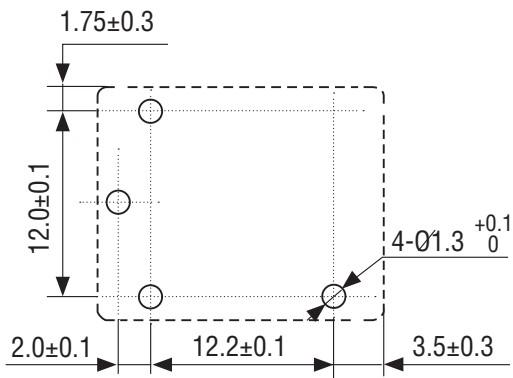
## 1 Form B Outline



Mounting Hole Layout  
(Bottom View)

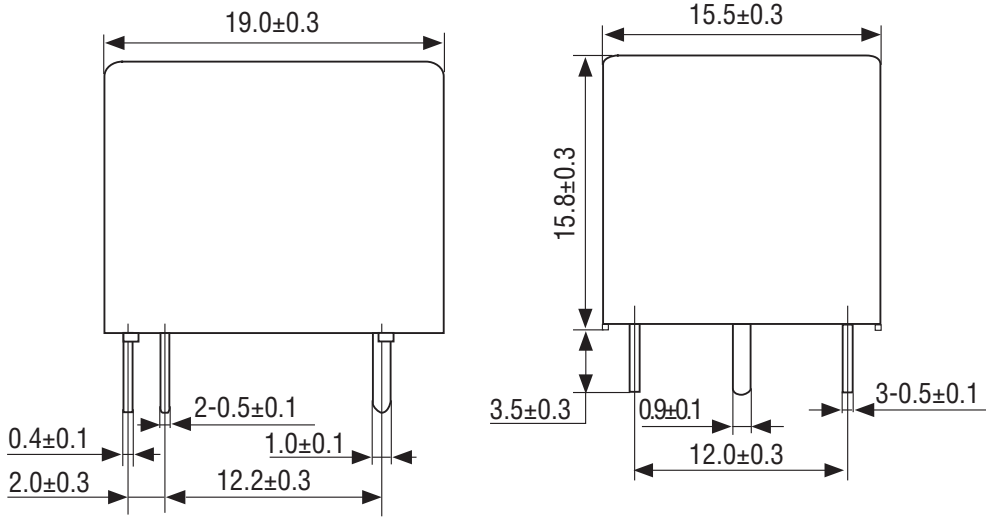


Wiring Diagram  
(Bottom View)



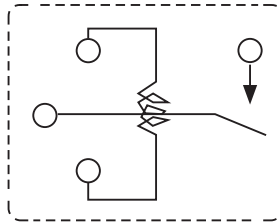
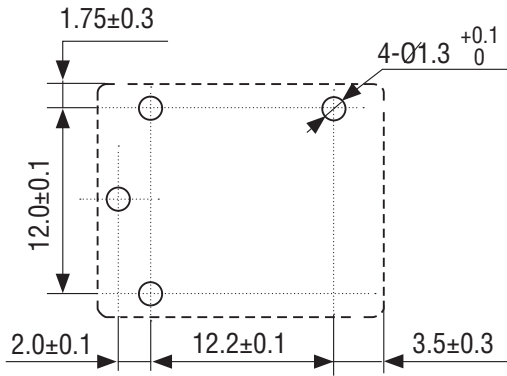
## 1 Form A

### Outline



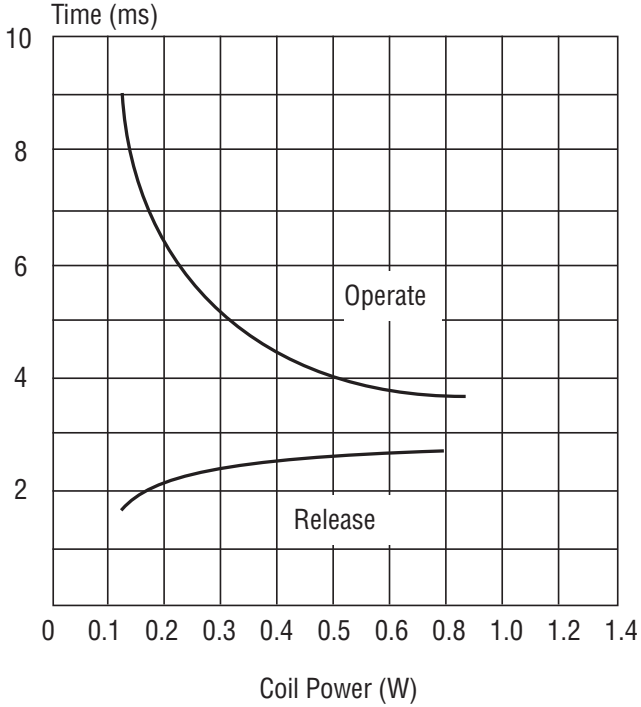
Mounting Hole Layout  
(Bottom View)

Wiring Diagram  
(Bottom View)

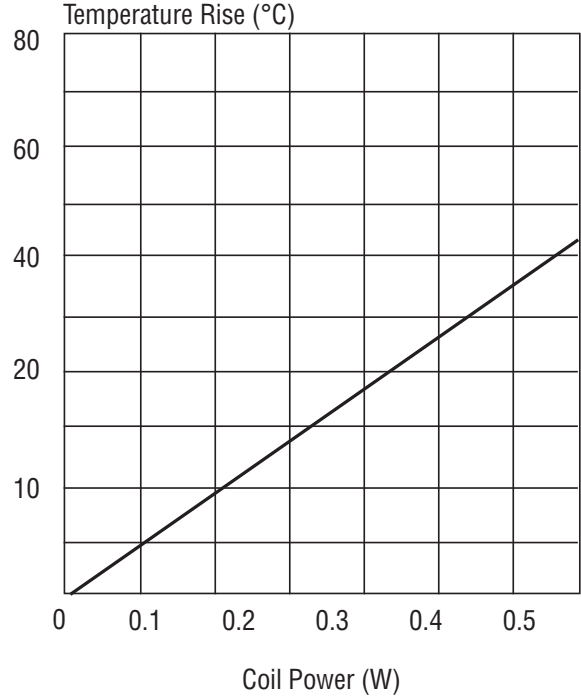


## Reference Data

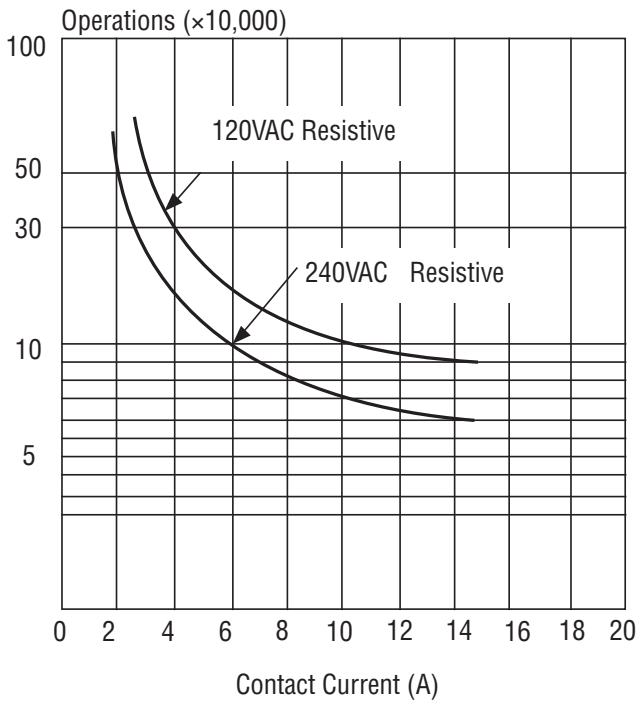
### Time Curve



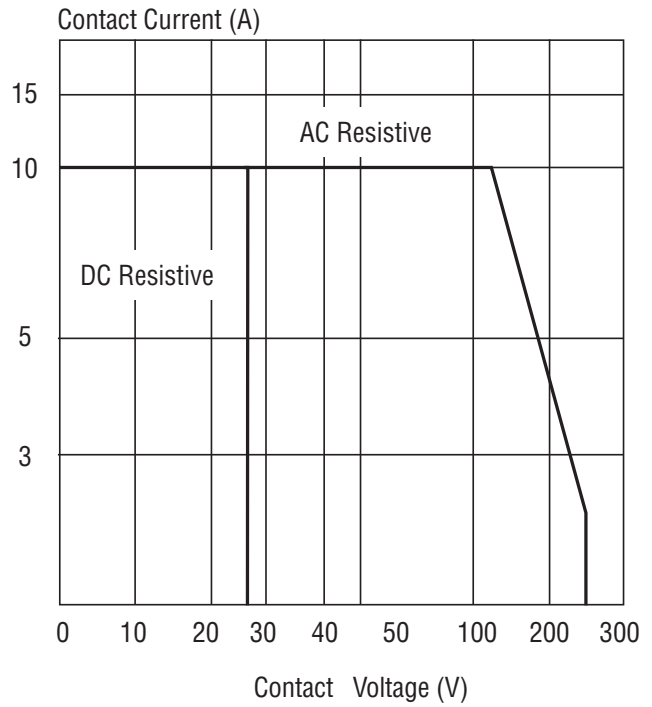
### Coil Temperature Rise



### Life Curves



### Maximum Switching Power







## OPTIONS (MOQ may apply)

Coil Voltage	3, 5, 6, 9, 12, 24 & 48V
Coil Sensitivity	Standard (450mW)
Contact Form	1 Form A, 1 Form B
Contact Configuration	SPST-NO, SPST-NC



## PART NUMBER TABLE

Part number	Nominal Coil Voltage	Contact Form	Enclosure	Coil Sensitivity	UNSPSC	EAN	Country of Origin
<b>61-6305</b>	5VDC	1 Form C	Sealed	High (360mW)	39122325	5053556018840	China
<b>61-6297</b>	12VDC	1 Form C	Sealed	High (360mW)	39122325	5053556018765	China
<b>61-6298</b>	24VDC	1 Form C	Sealed	High (360mW)	39122325	5053556018772	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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