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, 1minimum

Coil Data

Ambient Temperature: 23°C

Part number	Nominal Voltage VDC	Coil Resistance Ω+/-10%	Operate Voltage ≤VDC	Release Voltage ≥VDC	Coil Power mW
61-6305	5	70	3.5	0.5	360
61-6297	12	400	8.4	1.2	360
61-6298	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 CNEx16.3131U	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^2
	Misoperation	100m/s^2
Vibration Resistance	Endurance	10~55Hz, 1.5mm double amplitude
	Misoperation	10~55Hz, 1.5mm double amplitude

TERMINALS

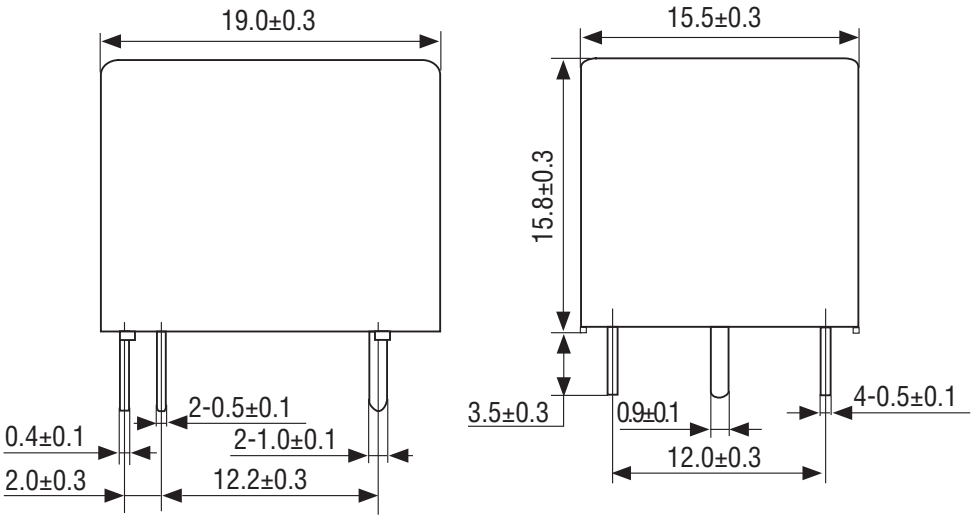
Terminal Type	Solder pins
Terminal Dimensions	See drawing on page 5, 6 and 7

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.)

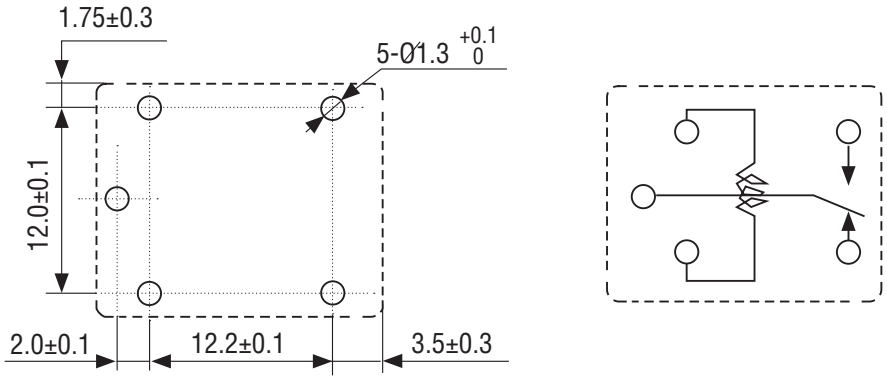
OUTLINE, WIRING DIAGRAM, MOUNTING HOLE LAYOUT (UNIT: mm)

1 Form C Outline

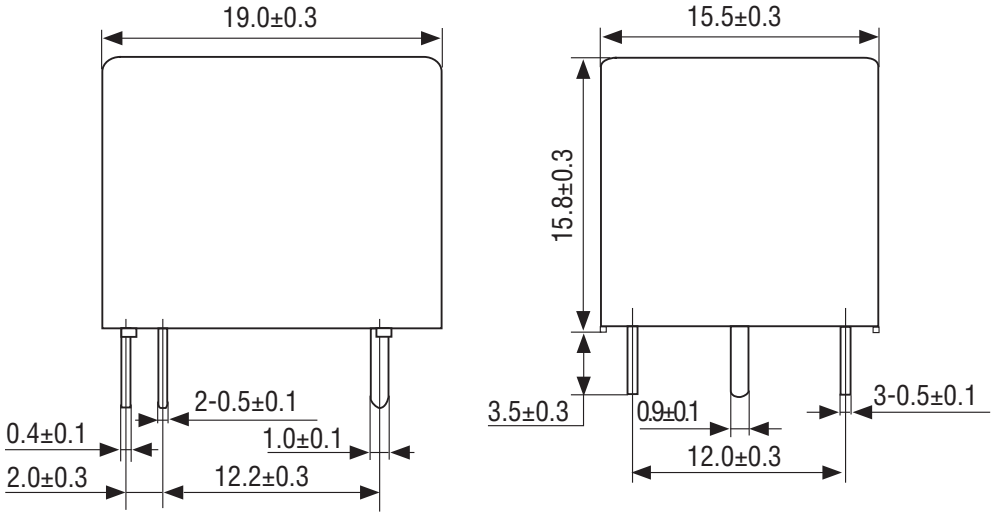


Mounting Hole Layout
(Bottom View)

Wiring Diagram
(Bottom View)

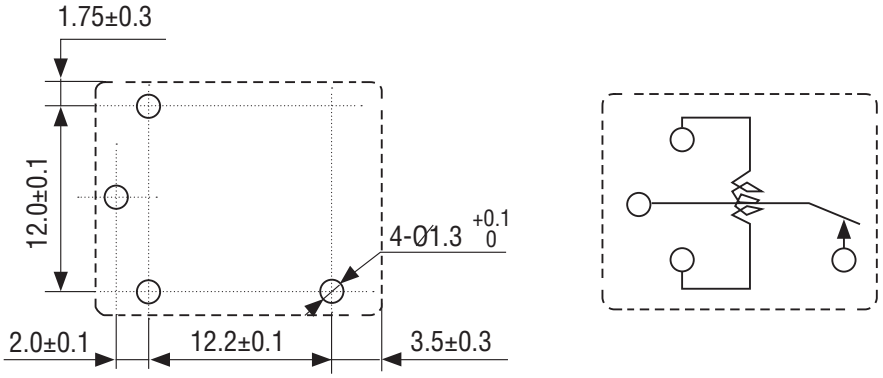


1 Form B Outline

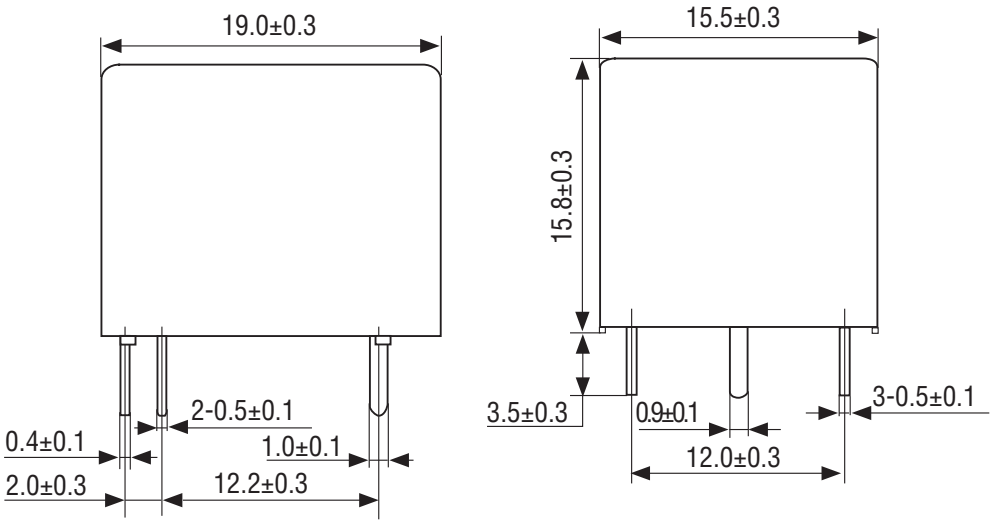


Mounting Hole Layout
(Bottom View)

Wiring Diagram
(Bottom View)

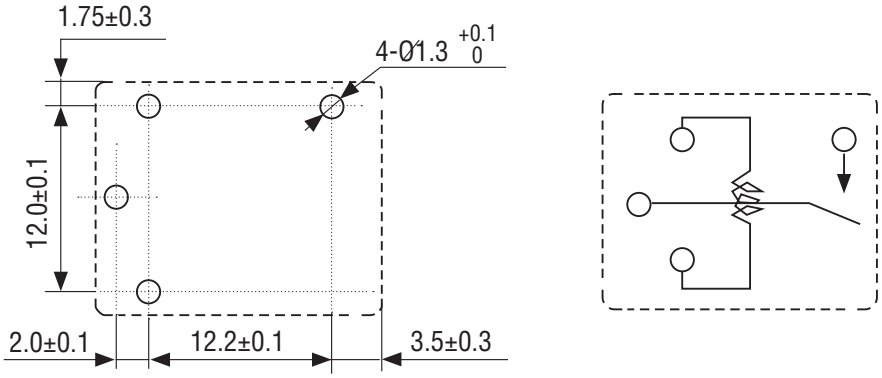


1 Form A Outline



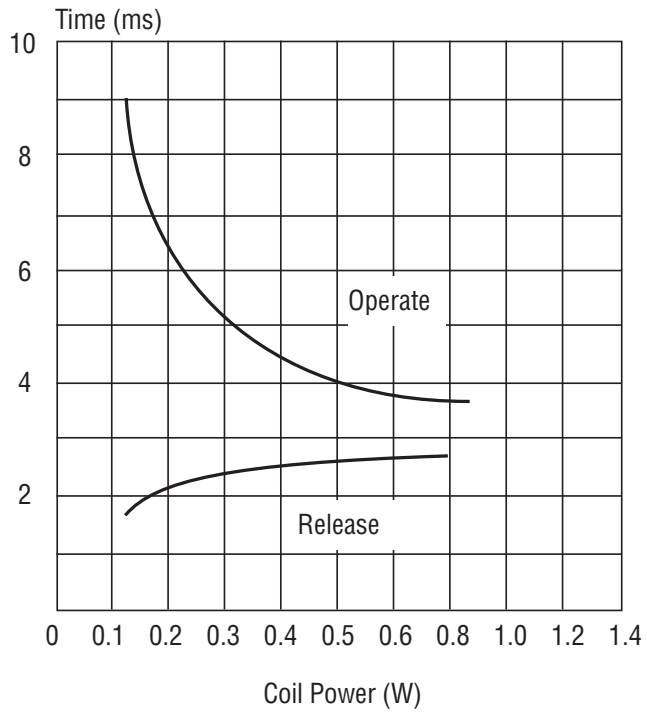
Mounting Hole Layout
(Bottom View)

Wiring Diagram
(Bottom View)

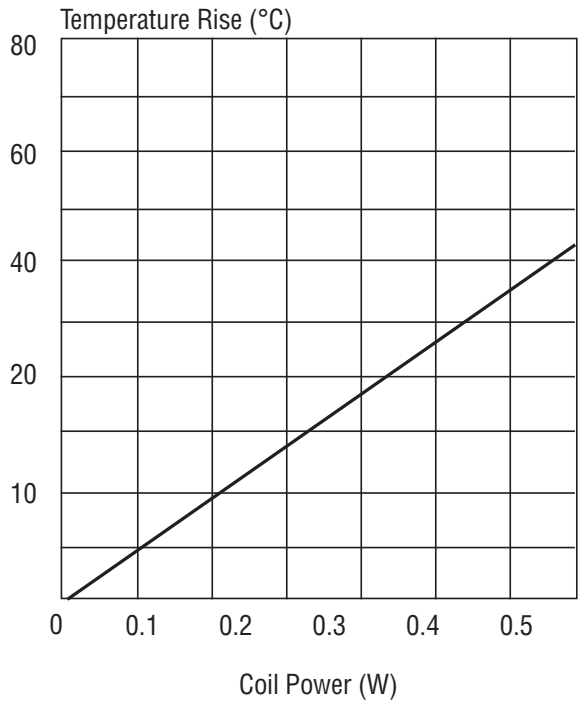


Reference Data

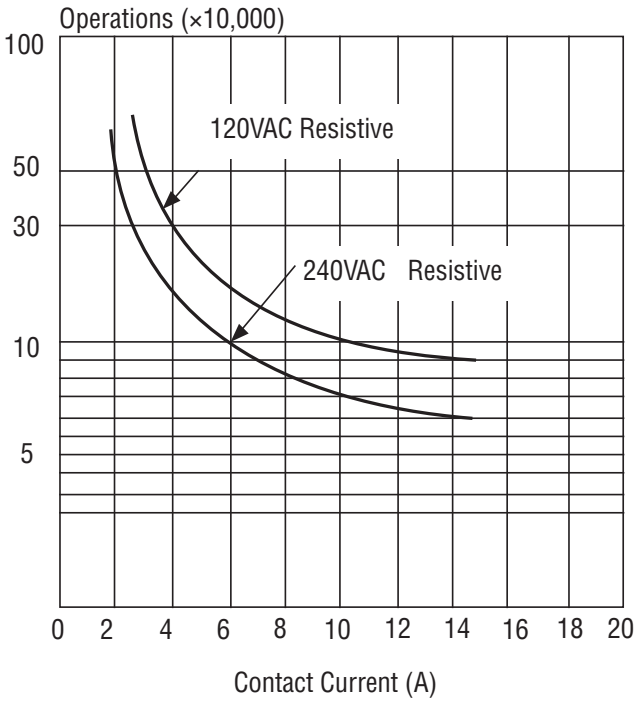
Time Curve



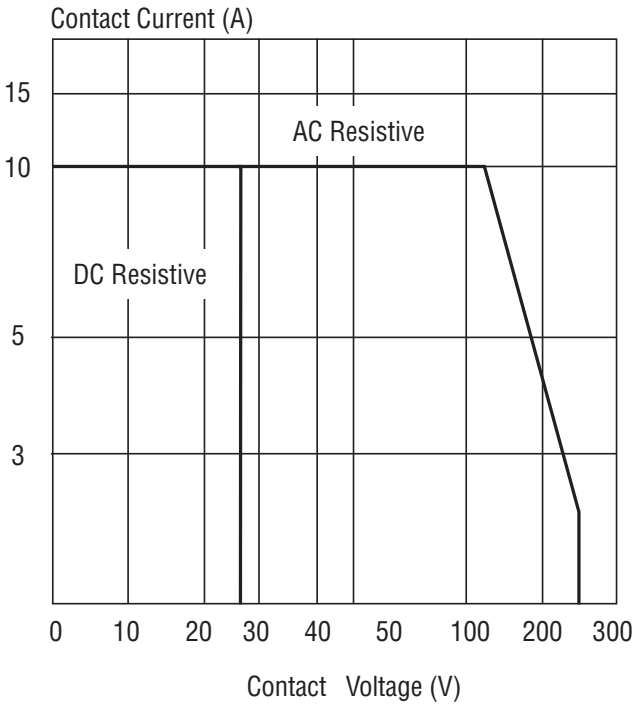
Coil Temperature Rise



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
61-6305	5VDC	1 Form C	Sealed	High (360mW)	39122325	5053556018840	China
61-6297	12VDC	1 Form C	Sealed	High (360mW)	39122325	5053556018765	China
61-6298	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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