

## High Sensitivity PCB Power Relay, 16A



### DESCRIPTION

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

### DISTINCTIVE FEATURES

- Fully Sealed Construction
- SPST-NO or SPDT Contact Configuration
- Contact Form: 1 Form A and 1 Form C
- PCB Mounting

### APPLICATIONS

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

16A

1 Form A

1 Form C

250V AC

30V DC





## ELECTRICAL SPECIFICATION

Contact Form	A - 1 Form A, C - 1 Form C (See Part Number Table)	
Contact Rating	Resistive	16A 250VAC/30VDC
	TV Rating:	TV-8 125VAC
	Inductive	8A 250VAC/30VDC (COS $\Phi$ =0.4,L/R=7ms)
Contact Resistance	Maximum	100m $\Omega$ (6VDC 1A)
Insulation Resistance	Minimum	1000M $\Omega$ 500VDC
Load	Maximum Switching Voltage	250VAC/30VDC
	Maximum Switching Current	16A
	Maximum Switching Power	4,000VA, 480W
	Minimum Switching Load	5VDC, 100mA
Dielectric Strength	Between open contacts	1,000VAC, 1min
	Between coil and contacts	4,000VAC, 1min

### Coil Data

Ambient Temperature: 23°C

Part number	Nominal Voltage VDC	Coil Resistance $\Omega$ +/-10%	Operate Voltage $\leq$ VDC	Release Voltage $\geq$ VDC	Coil Power mW	Contact Form
<b>61-6300</b>	24	1067	18.0	2.4	540	A - 1 form A
<b>61-6301</b>	24	1067	18.0	2.4		C - 1 Form C
<b>61-6306</b>	12	267	9.0	1.2		C - 1 Form C



## GENERAL SPECIFICATION

Series	High Sensitivity Signal 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
CSA 1063015 (LR 106040)	A/C	0.72W/0.54W	3 - 48VDC	16A 120VAC	—
TUV 50116140-001	A	0.72W/0.54W	3 - 48VDC	16A 120VAC	Ambient Temperature: 85°C
	C	0.72W/0.54W	3 - 48VDC	NO/NC: 16A/10A 250VAC	Ambient Temperature: 85°C
UL E164730	A/C	0.72W/0.54W	3 - 48VDC	16A 120VAC	Ambient Temperature: 40°C
CQC09002035018 (GB/T 21711.1-2008)	A	0.72W/0.54W	3 - 48VDC	16A 120VAC	Ambient Temperature: 85°C
	C	0.72W/0.54W	3 - 48VDC	NO/NC: 16A/10A 250VAC	Ambient Temperature: 85°C

ISO9001, ISO/TS16949, ISO14001 Approved

Specifications subject to change without notice.



## ENVIRONMENTAL/OPERATING SPECIFICATION

Life	Electrical	100,000 operations
	Mechanical	10,000,000 operations
Operate Time	Maximum 15ms	
Release Time	Maximum 8ms	
Operating Temperature	-30~+70°C (540mW)	
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 pages 4 and 5



## DIMENSIONS/DRAWINGS

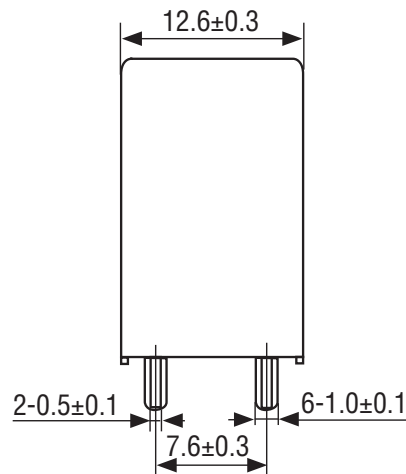
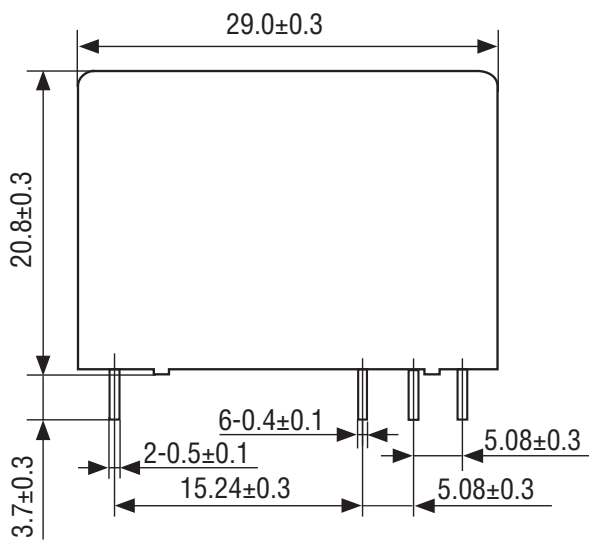
Units	mm - unless stated otherwise
Dimensions (Summary)	29.0 x 12.6 x 20.8
Length	29.0
Width	12.6
Height (Excluding pins)	20.8
Weight	13g (approx.)



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

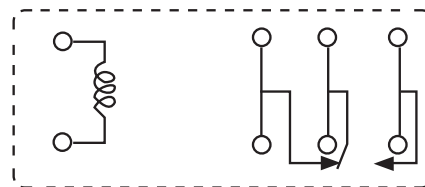
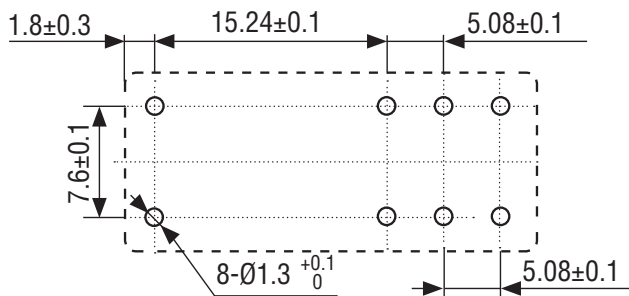
### 1 Form C

### Outline



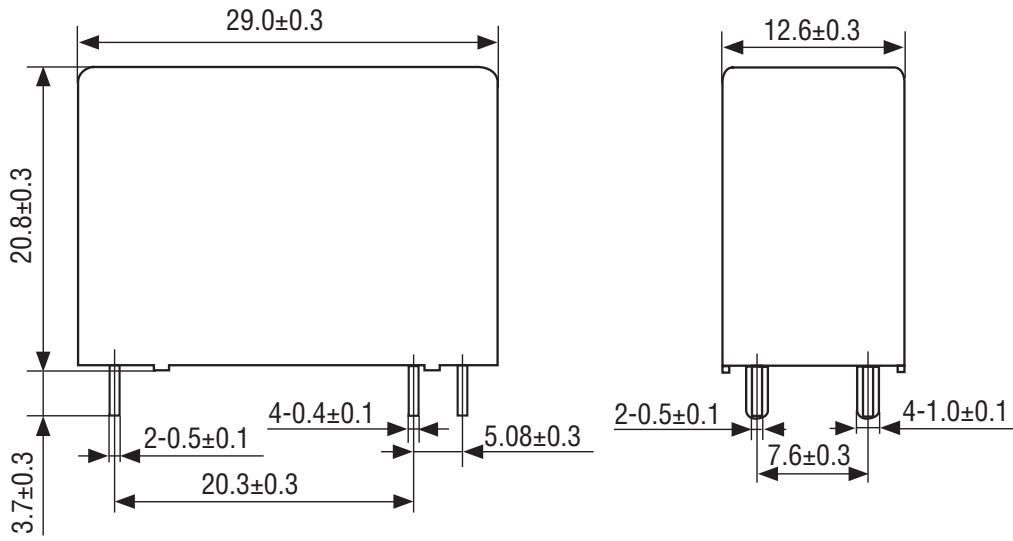
Mounting Hole Layout  
(Bottom View)

Wiring Diagram  
(Bottom View)



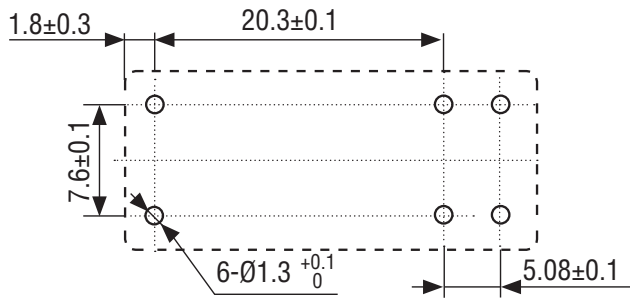
## 1 Form A

## Outline



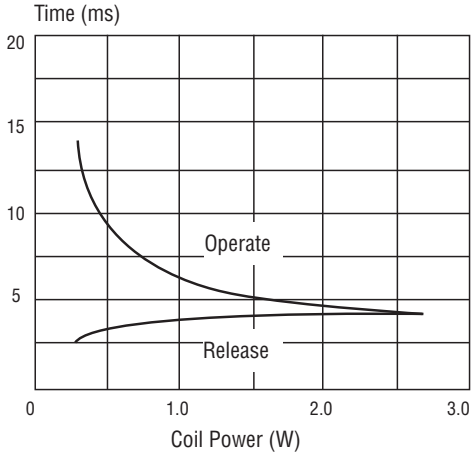
Mounting Hole Layout  
(Bottom View)

Wiring Diagram  
(Bottom View)

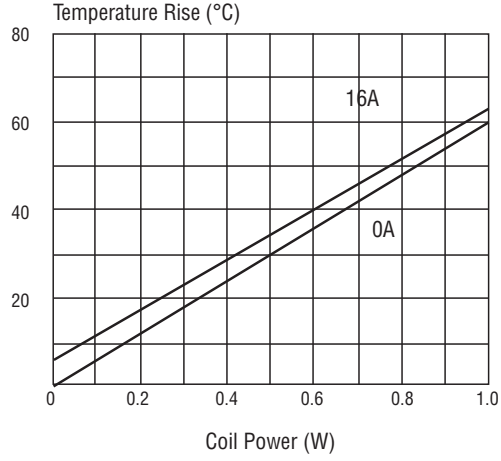


## REFERENCE DATA

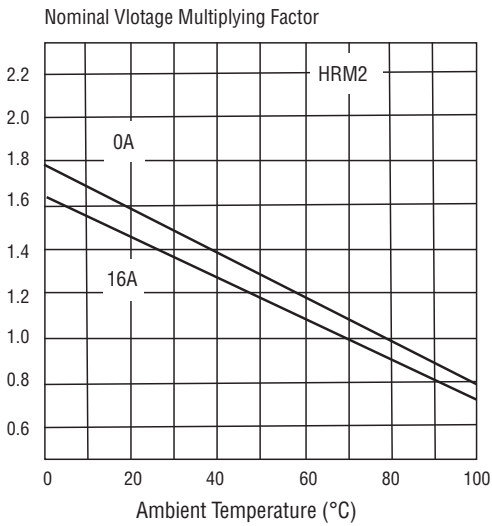
### Time Curve



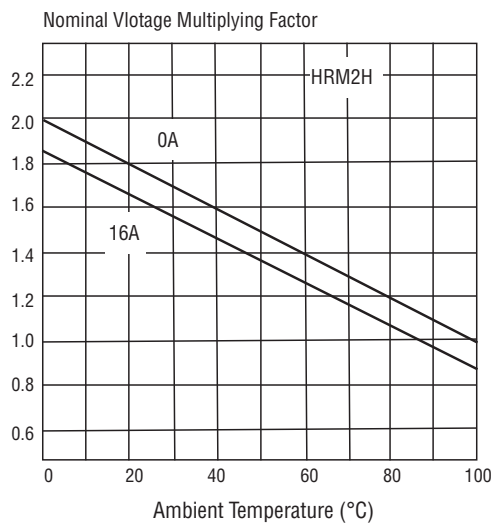
### Coil Temperature Rise



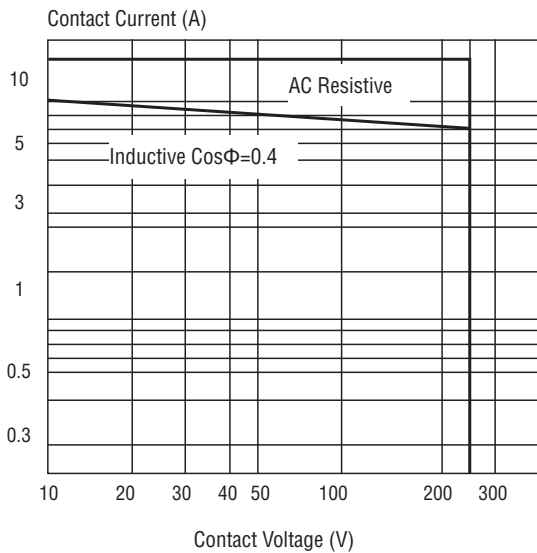
### Operating Range



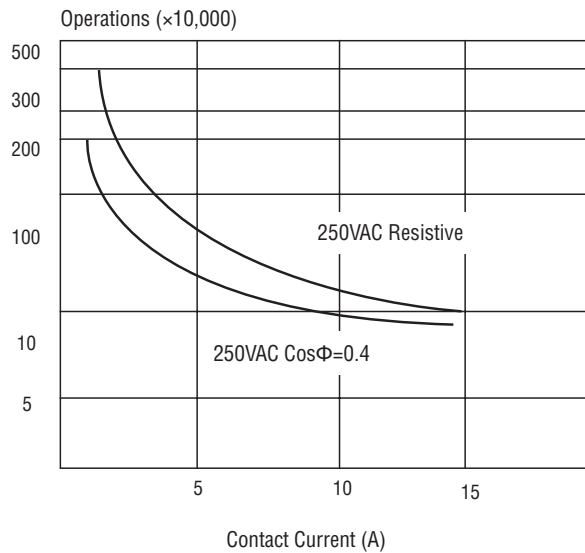
### Operating Range



### Maximum Switching Power



### Life Curves





## OPTIONS (MOQ may apply)

Coil Voltage	3, 5, 6, 9, 12, 24 & 48V
Coil Sensitivity	Standard (720mW)
Contact Form	1 Form A, 1 Form C
Contact Configuration	SPST-NO, SPDT



## PART NUMBER TABLE

Part number	Nominal Coil Voltage	Contact Form	Enclosure	Coil Sensitivity	UNSPSC	EAN	Country of Origin
<b>61-6300</b>	24 VDC	1 Form A	Sealed	High (540mW)	39122325	5053556018796	China
<b>61-6301</b>	24 VDC	1 Form C	Sealed	High (540mW)	39122325	5053556018802	China
<b>61-6306</b>	12V DC	1 Form C	Sealed	High (540mW)	39122325	5053556018857	China

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



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