

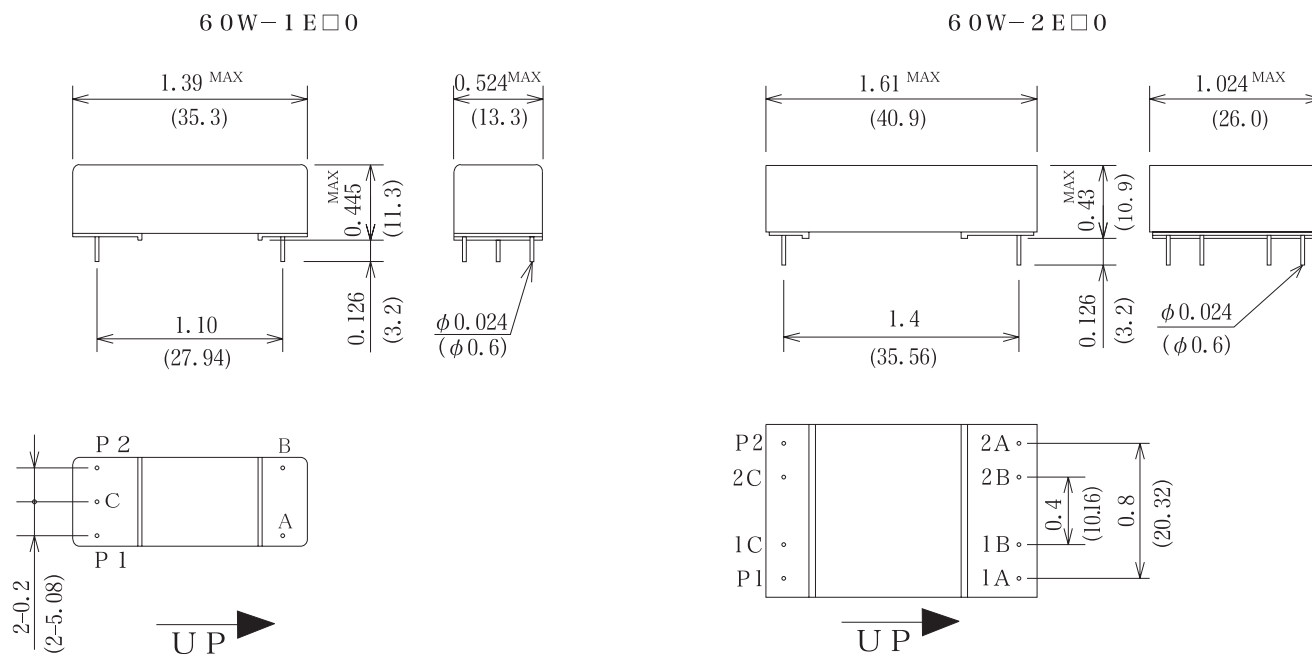
# Mercury Wetted Relays for Mounting on P.C. Boards.(2)



The 60W series of mercury relays is free of contact chattering since their mercury-covered contacts facilitate opening and closing. In addition, they offer unfailing contact performance from the lightest amperage requirements ( $\mu\text{A}$ ) to the heaviest (50 VA). Their virtually unlimited life ( $10^9$  cycles, mechanical) makes them ideal for applications where reliability is of critical concern, such as in computer devices and automated equipment.

## Mechanical Dimensions

All dimensions are measured in inches (millimeters).





60W Series			Model Number		Model Number	
			60W-1E□0		60W-2E□0	
Parameters	Test Condition	Units	1 Form C		2 Form C	
<b>Coil Specifications</b>						
Nominal coil voltage		VDC	5	12	5	12
Coil resistance	±10%at20°C	Ω	130	400	55	370
Operating voltage	15°C~35°C	VDC-Max	3.6	9.6	3.6	9.6
Operating voltage range	15°C~35°C	VDC	3.6/5.5	9.6/13.2	3.6/5.5	9.6/13.2
Release voltage	15°C~35°C	VDC-Min	0.7	1.2	0.7	1.2
<b>Contact Ratings</b>						
Switching voltage	Max. DC/Peak AC resistance	Volts	500			
Switching current	Max. DC/Peak AC resistance	Amps	1.0			
Carry current	Max. DC/Peak AC resistance	Amps	2.0			
Contact rating	Max. DC/Peak AC resistance	Watts	50			
Life expectancy	1V. 10mA	×10 <sup>6</sup> cycles	1000			
Contact resistance	Maximum initial	mΩ	80			
Contact resistance stability	Maximum initial	mΩ	5.0			
<b>Relay Specifications</b>						
Insulation resistance	Between all isolated pins at 500V 20°C 40%RH	Ω	10 <sup>10</sup>			
Dielectric strength	Between contacts Contacts to Coil	VDC	1000 1000			
Operating time	At nominal coil voltage, 50Hz Square wave	msec	2.0 (No Bounce)			
Release time	Diode suppression	msec	2.0			
<b>Environmental Ratings</b> Measurement reference conditons Temp. : 15°C~35°C Humidity : 25%~85%RH Atmospheric pressure : 860~1060hPa Storage temp. : -30°C~+80°C Operating temp : -10°C~+60°C The operating and Release Voltage and the coil resistance are specified at 20°C. These values change approximately 0.4%/°C change in the ambient temperature. Vibration : 20Gs to 2000Hz Shock : 50Gs		Schematics Top view				

### Notes :

- (1) Values are specified with a resistive load being applied. A contact protective circuit is required for C and L Type loads.
- (2) The values for the operating time and release time however, are when the rated coil voltage is applied and a clamp diode is attached.
- (3) The 60W and series models have Hg wet contacts, are position sensitive, and must be mounted within 30° of the vertical plane. See the schematic.
- (4) The relays mounted in the Model 60W and fully observe the (+) and (-) polarity designations of the coil drive voltage.

### ORDERING CODE

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(1) (2)

Example 60W-1E10 Represents Series 60W with 1Form C, Hg Wet, Multi-Pole and Coil Voltage 5V.

- |                       |                  |
|-----------------------|------------------|
| (1) Number of capsule | (2) Coil Voltage |
| 1-1capsule            | 1-5VDC           |
| 2-2capsules           | 2-12VDC          |