



DB LECTRO  
COMPOSANTS ÉLECTRONIQUES  
ELECTRONIC COMPONENTS

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

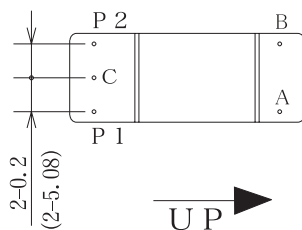
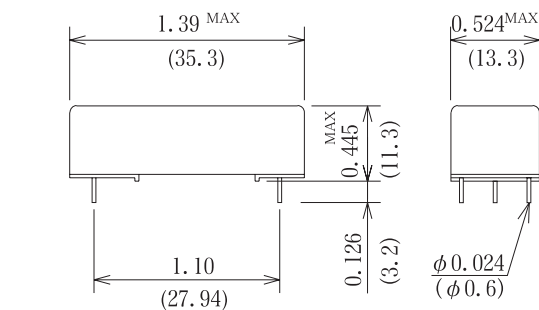


The 60W series of mercury relays is free of contact chattering since their mercury-covered contacts facilitate opening and closing. In addition, they offer unfailing contact performance from the lightest amperage requirements ( $\mu$ A) to the heaviest (50 VA). Their virtually unlimited life ( $10^9$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

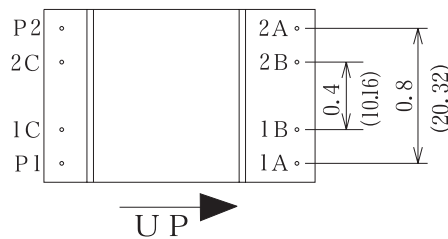
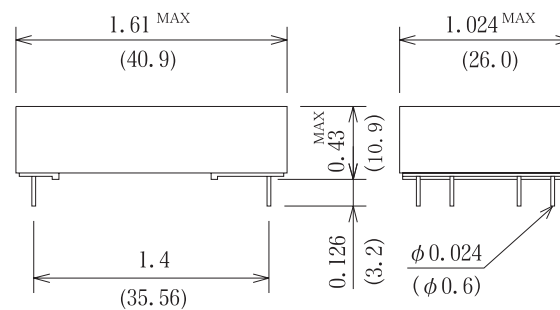
## Mechanical Dimensions

All dimensions are measured  
in inches (millimeters).

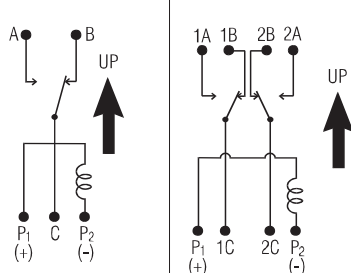
60W-1E□0



60W-2E□0





60W Series			Model Number		Model Number	
			60W-1E□0		60W-2E□0	
Parameters	Test Condition	Units	1 Form C		2 Form C	
Coil Specifications						
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
Contact Ratings						
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			
Relay Specifications						
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			
Environmental Ratings		Schematics Top view				
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						

## 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

6 0 W - □ E □ 0  
(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          |