## Power Relays





### **Coil Data**

Nominal voltage : 5, 12 and 24V dc.
Coil resistance : Refer to coil data chart.
Operate voltage : Refer to coil data chart.
Release voltage : Refer to coil data chart.
Nominal power : 150mW, 250mW and 540mW.

### **Contact Data**

Contact form : 1 form A.
Contact material : AgAlloy.

Contact rating : 10A 250V ac / 30V dc, TV-5.

Maximum switching voltage : 250V ac / 30V dc.

Maximum switching current : 10A.

Maximum switching power: 2,500VA, 300W.Minimum switching load: 5V dc,100mA.Maximum contact resistance: 100mΩ (6V dc 1A).

Life

Electrical : 100,000 operations.
Mechanical : 2,000,000 operations.

### **General Data**

Minimum insulation resistance : 1,000M $\Omega$  500V dc.

Dielectric strength : 1,000V ac, 1 min between open contacts.

4,000V ac, 1 min between coil and contacts.

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Sure strength : 10,000V ac.

Maximum operate time : 15ms.

Maximum release time : 8ms.

Operate temperature : -40 to +70°C.

### **Shock Resistance**

 $\begin{tabular}{lll} Endurance & : 1,000m/s^2. \\ Misoperation & : 100m/s^2. \\ \end{tabular}$ 

### **Vibration Resistance**

Endurance : 10 to 55Hz, 1.5mm double amplitude.

Misoperation : 10 to 55Hz, 1.5mm double amplitude.

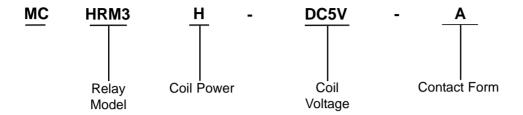
Humidity : 35% to 95%RH, +40°C.



# Power Relays



### **Order Code**



**Coil Power** : H = High Sensitivity 250mW.

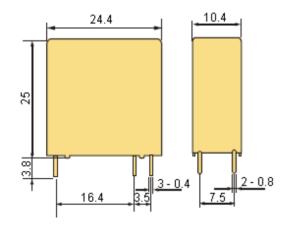
**Coil Voltage** : 5 = DC5V, 12 = DC12V and 24 = DC24V.

**Contact Form** : A = 1 Form A.

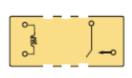
### Coil Data Chart 20°C

Description	Nominal Voltage V dc	Coil Resistance Ω ±10%	Operate Voltage ≤ V dc	Release Voltage ≥ V dc	Coil Power mW	Part Number
Relay, Power, SPST, 5V dc Coil, 0.25W	5	100	3.75	0.5		MCHRM3H-DC5V-A
Relay, Power, SPST, 12V dc Coil, 0.25W	12	576	9	1.2	250	MCHRM3H-DC12V-A
Relay, Power, SPST, 24V dc Coil, 0.25W	24	2304	18	2.4		MCHRM3H-DC24V-A

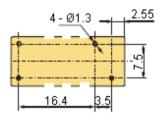
### **Dimensions**



### Wiring Diagrams (Bottom View)



### Mounting Hole Layout (Bottom View)



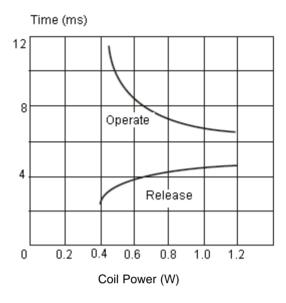
Dimensions : Millimetres

# Power Relays

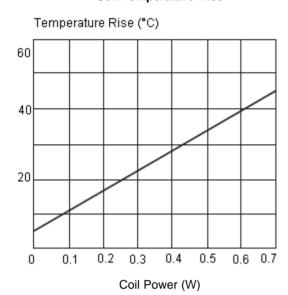


### **Characteristic Chart Data**

### **Timing**

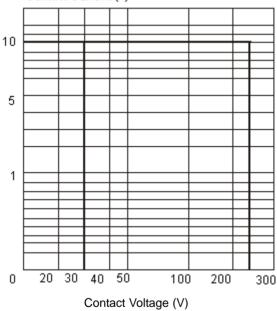


### **Coil Temperature Rise**

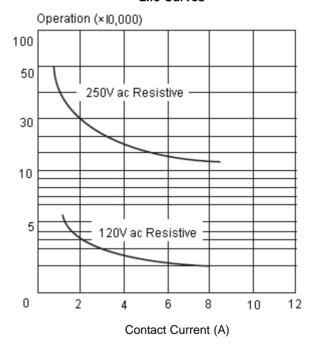


### **Maximum Switching Power**

### Contact Current (A)



#### Life Curves



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