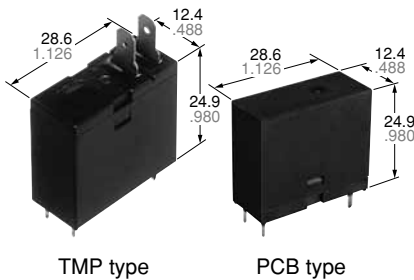




### 1 Form A 16A power relay for micro wave oven

## LE RELAYS (ALE)



**RoHS compliant**

Protective construction: Flux-resistant type

### FEATURES

**1. Supports magnetron and heater loads**

Capable for switching magnetron and heater loads found in microwave ovens.

**2. Excellent heat resistance**

Ambient temperature: up to 85°C 185°F  
 Certified UL coil insulation class B and class F

**3. Long insulation distance**

- Creepage distance and clearances between contact and coil:  
 Clearance Min. 8 mm .315 inch  
 Creepage Min. 9.5 mm .374 inch
- Surge withstand voltage: 10,000V

**4. Low operating power**

Rated operating power: 400mW/200mW (High sensitive type)

**5. A wide variety of types**

Product line consists of 4 types with different shapes and pins

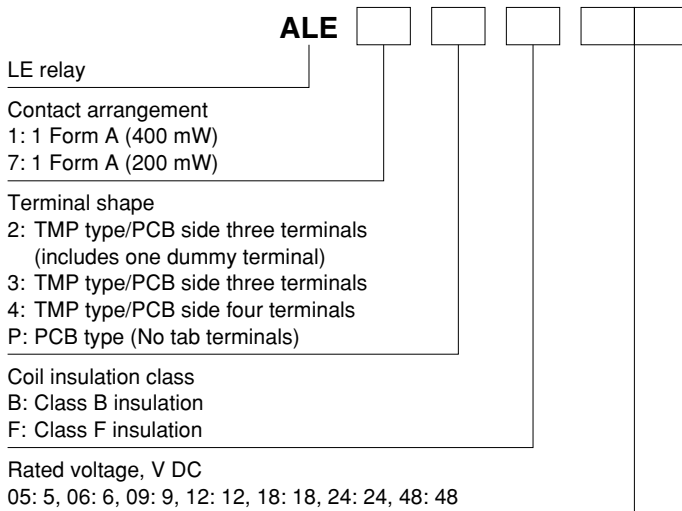
**6. Conforms to the various safety standards:**

UL, CSA, TÜV and VDE approved (TMP type)  
 UL, CSA and VDE approved (PCB type)

### TYPICAL APPLICATIONS

1. Microwave ovens
2. Refrigerators
3. OA equipment

### ORDERING INFORMATION



## TYPES

## 1. Standard type

Contact arrangement	Rated voltage	TMP type			PCB type (No tab terminals)	Standard packing	
		PCB side three terminals (includes one dummy terminal)	PCB side three terminals	PCB side four terminals		Carton	Case
		Part No.	Part No.	Part No.			
1 Form A	5V DC	ALE12○05	ALE13○05	ALE14○05	ALE1P○05	100 pcs.	500 pcs.
	6V DC	ALE12○06	ALE13○06	ALE14○06	ALE1P○06		
	9V DC	ALE12○09	ALE13○09	ALE14○09	ALE1P○09		
	12V DC	ALE12○12	ALE13○12	ALE14○12	ALE1P○12		
	18V DC	ALE12○18	ALE13○18	ALE14○18	ALE1P○18		
	24V DC	ALE12○24	ALE13○24	ALE14○24	ALE1P○24		
	48V DC	ALE12○48	ALE13○48	ALE14○48	ALE1P○48		

○: Input the following letter. Class B: B, Class F: F

## 2. High sensitive type

Contact arrangement	Rated voltage	TMP type			PCB type (No tab terminals)	Standard packing	
		PCB side three terminals (includes one dummy terminal)	PCB side three terminals	PCB side four terminals		Carton	Case
		Part No.	Part No.	Part No.			
1 Form A (High sensitivity: 200mW)	5V DC	ALE72○05	ALE73○05	ALE74○05	ALE7P○05	100 pcs.	500 pcs.
	6V DC	ALE72○06	ALE73○06	ALE74○06	ALE7P○06		
	9V DC	ALE72○09	ALE73○09	ALE74○09	ALE7P○09		
	12V DC	ALE72○12	ALE73○12	ALE74○12	ALE7P○12		
	18V DC	ALE72○18	ALE73○18	ALE74○18	ALE7P○18		
	24V DC	ALE72○24	ALE73○24	ALE74○24	ALE7P○24		
	48V DC	ALE72○48	ALE73○48	ALE74○48	ALE7P○48		

○: Input the following letter. Class B: B, Class F: F

## RATING

## 1. Coil data

## 1) Standard type

Rated voltage	Operate voltage* (at 20°C 68°F)	Release voltage* (at 20°C 68°F)	Rated operating current [±10%] (at 20°C 68°F)	Coil resistance [±10%] (at 20°C 68°F)	Rated operating power	Max. allowable voltage (at 20°C 68°F)
5V DC	Max. 75%V of rated voltage (Initial)	Min. 5%V of rated voltage (Initial)	80 mA	63Ω	400mW	145%V of rated voltage
6V DC			66.7mA	90Ω		
9V DC			44.4mA	203Ω		
12V DC			33.3mA	360Ω		
18V DC			22.2mA	810Ω		
24V DC			16.7mA	1,440Ω		
48V DC			8.3mA	5,760Ω		

\* Square, pulse drive

## 2) High sensitive type

Rated voltage	Operate voltage* (at 20°C 68°F)	Release voltage* (at 20°C 68°F)	Rated operating current [±10%] (at 20°C 68°F)	Coil resistance [±10%] (at 20°C 68°F)	Rated operating power	Max. allowable voltage (at 20°C 68°F)
5V DC	Max. 75%V of rated voltage (Initial)	Min. 5%V of rated voltage (Initial)	40 mA	125Ω	200mW	145%V of rated voltage
6V DC			33.3mA	180Ω		
9V DC			22.2mA	405Ω		
12V DC			16.7mA	720Ω		
18V DC			11.1mA	1,620Ω		
24V DC			8.3mA	2,880Ω		
48V DC			4.2mA	11,520Ω		

\* Square, pulse drive