

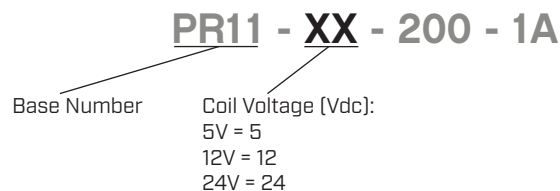
**SERIES:** PR11 | **DESCRIPTION:** POWER RELAY**FEATURES**

- 5V/12V/24V
- SPST
- 200 mW

**MODEL**

|                 | <b>coil voltage</b> | <b>coil resistance</b>           | <b>operating voltage</b> | <b>release voltage</b> | <b>coil power</b>  |
|-----------------|---------------------|----------------------------------|--------------------------|------------------------|--------------------|
|                 | <b>typ</b><br>(Vdc) | <b></b><br>( $\Omega \pm 10\%$ ) | <b>min</b><br>(Vdc)      | <b>max</b><br>(Vdc)    | <b>max</b><br>(mW) |
| PR11-5V-200-1A  | 5                   | 125                              | 3.75                     | 0.5                    | 200                |
| PR11-12V-200-1A | 12                  | 720                              | 9.00                     | 1.2                    | 200                |
| PR11-24V-200-1A | 24                  | 2,880                            | 18.00                    | 2.4                    | 200                |

Notes: 1. All specifications are measured at 23°C unless otherwise specified.

**PART NUMBER KEY**

## CONTACT SPECIFICATIONS

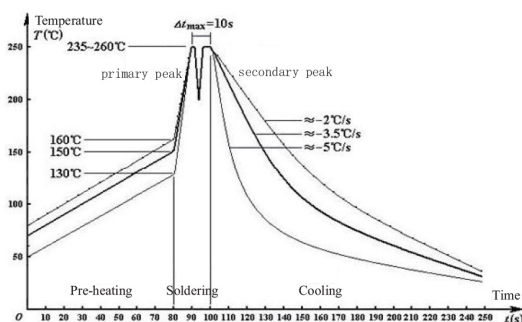
| parameter             | conditions/description        | min | typ                   | max          | units                    |
|-----------------------|-------------------------------|-----|-----------------------|--------------|--------------------------|
| contact form          | 1 Form A                      |     |                       |              |                          |
| contact material      | Ag alloy                      |     |                       |              |                          |
| contact rating        | 5 A @ 250 Vac<br>5 A @ 28 Vdc |     |                       |              |                          |
| contact resistance    | at 6 Vdc, 1.0 A               |     |                       | 100          | mΩ                       |
| max switching voltage |                               |     |                       | 250<br>28    | Vac<br>Vdc               |
| max switching current |                               |     |                       | 10           | A                        |
| max switching power   |                               |     |                       | 1,250<br>280 | VA<br>W                  |
| min switching load    | 5 Vdc, 100 mA                 |     |                       |              |                          |
| life                  | electrical<br>mechanical      |     | 100,000<br>10,000,000 |              | operations<br>operations |

## GENERAL SPECIFICATIONS

| parameter             | conditions/description  | min   | typ            | max | units                                |
|-----------------------|---|-------|----------------|-----|--------------------------------------|
| insulation resistance | at 500 Vdc  | 1,000 |                |     | MΩ                                   |
| dielectric strength   | between open contacts for 1 minute<br>between coil and contacts for 1 minute                    |       | 1,000<br>3,500 |     | Vac<br>Vac                           |
| operate time          |   |       |                | 8   | ms                                   |
| release time          |   |       |                | 5   | ms                                   |
| shock resistance      | endurance<br>misoperation   |       | 1,000<br>100   |     | m/s <sup>2</sup><br>m/s <sup>2</sup> |
| vibration resistance  | endurance: 10~55 Hz, 1.5 mm double amplitude<br>misoperation: 10~55 Hz, 1.5 mm double amplitude |       |                |     |                                      |
| operating temperature |   | -40   |                | 85  | °C                                   |
| humidity              | at 40°C   | 35    |                | 95  | %RH                                  |
| weight                |   |       | 7.0            |     | g                                    |
| safety approvals      | UL/cUL 508  |       |                |     |                                      |
| flammability rating   | UL94V-0   |       |                |     |                                      |
| RoHS                  | yes   |       |                |     |                                      |
| packaging             | tube: 25 pcs per tube<br>carton size: 324 x 292 x 160 mm<br>carton QTY: 1,000 pcs per carton    |       |                |     |                                      |

## SOLDERABILITY

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 3.5±0.5 seconds    | 340 | 350 | 360 | °C    |
| wave soldering | for 10±1 seconds       | 255 | 260 | 265 | °C    |

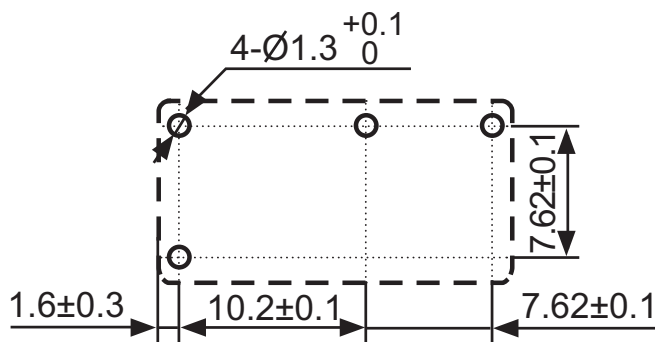
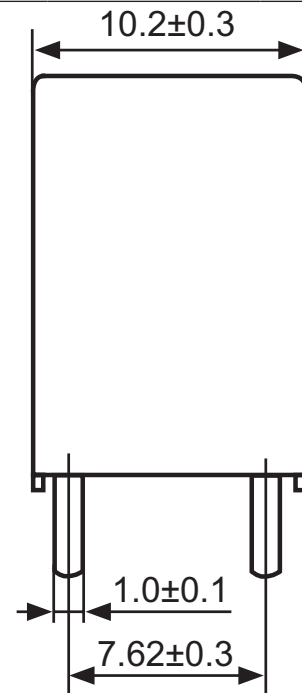
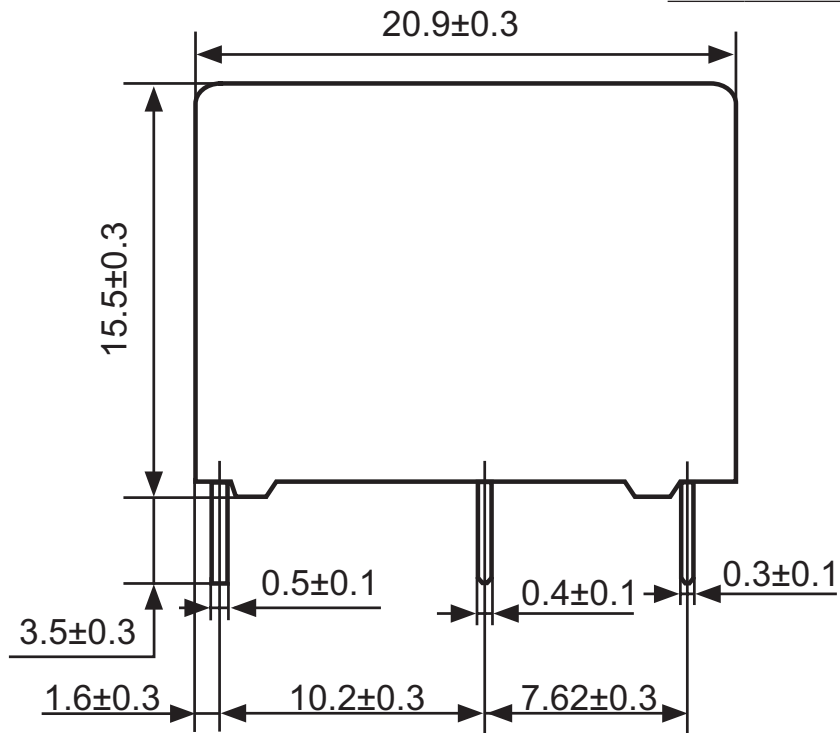


Double-wave Soldering Curve

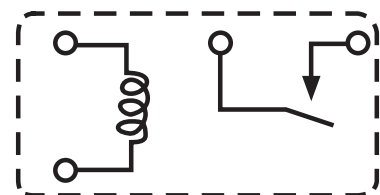
## MECHANICAL DRAWING

units: mm  
 tolerance:  $\pm 0.3$  mm  
 unless otherwise noted

| ITEM | DESCRIPTION | MATERIAL             | PLATING/COLOR |
|------|-------------|----------------------|---------------|
| A    | housing     | PBT [UL94V-0]        | black         |
| B    | terminals   | copper covered steel | tin           |



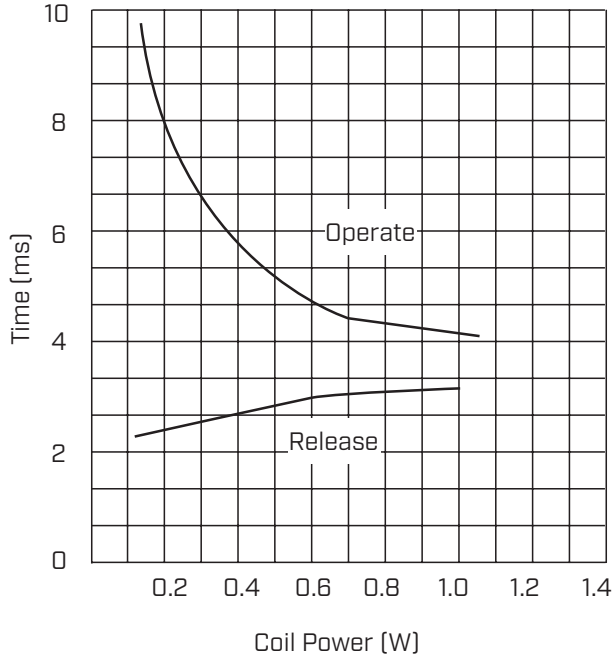
Recommended PCB Layout  
 Bottom View



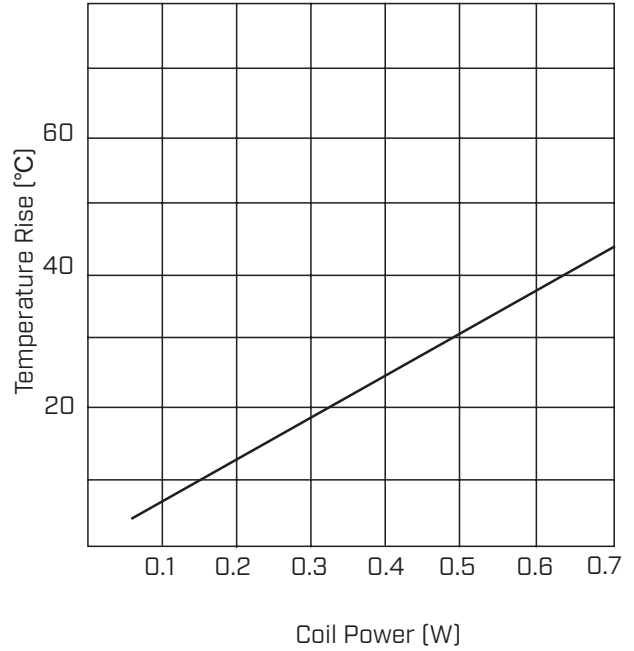
Wiring Diagram  
 Bottom View

## CHARACTERISTIC CURVES

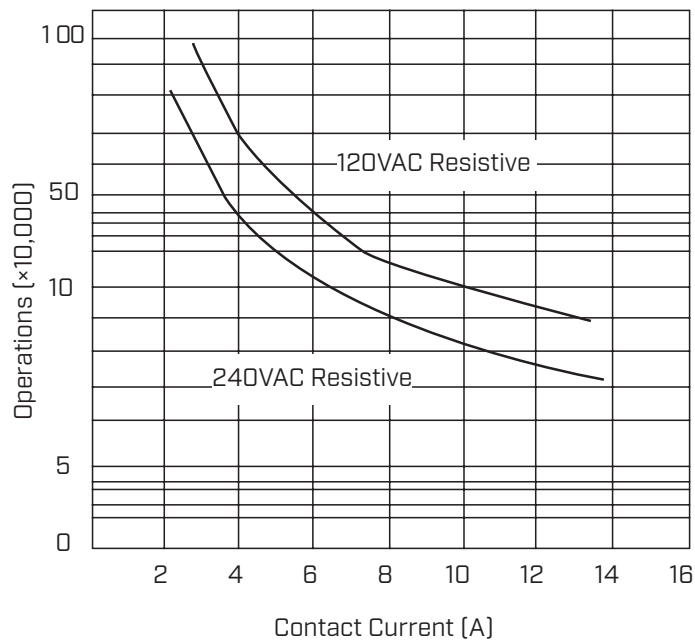
Time Curve



Coil Temperature Rise



Life Curve



## REVISION HISTORY

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 08/09/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.



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