

## NRP SERIES



Industrial & Electrical Components

## Miniature P.C.B Relay

Part No.

NRP-02



- Ultra-small type with dimensions.
- High sensitivity:200mW coil power
- UL/C-UL recognized
- Sealed type available

### CONTACT

|                                   |                            |
|-----------------------------------|----------------------------|
| Arrangement                       | 1C                         |
| Contact Material                  | Silver Alloy               |
| Contact Resistive<br>(At 6VDC 1A) | $\leq 100 \text{ m}\Omega$ |
| Rating                            | 3A 120VAC                  |
| Resistive load ( $\cos\phi=1$ )   | 3A 24VDC                   |
| Max. Switching Voltage            | 240VAC / 60VDC             |
| Max. Switching Current            | 5A                         |
| Max. Switching Power              | 360VA / 90W                |
| Expected life                     |                            |
| Mechanical (at 300 ops/1 min)     | $1 \times 10^7$ Min        |
| Electrical (at 30 ops/1 min)      | $1 \times 10^5$ Min.       |

### CHARACTERISTICS

|                           |                             |
|---------------------------|-----------------------------|
| Operate Time              | 5 ms. Max.                  |
| Release Time              | 5 ms. Max.                  |
| Initial breakdown voltage |                             |
| Between Coil & Contact    | 1000VAC (50/60Hz)for 1 min. |
| Between Open Contacts     | 500VAC (50/60Hz)for 1 min.  |
| Insulation Resistance     | Min.100M $\Omega$ (500 VDC) |
| Shock: Endurance          | 10G                         |
| Damage                    | 50G                         |
| Vibration Endurance       | 10 to 55 Hz ,1.5mm D.A.     |
| Damage                    | 10 to 55 Hz ,1.5mm D.A.     |
| Humidity                  | 40~85%RH                    |
| Ambient temperature       | -40 to +85 $^{\circ}$ C     |
| Unit weight               | $\leq 3.5$ g                |

### ORDERING INFORMATION

e.g

NRP - 02 - C - 12D - H

①

②

③

④

⑤

① Series: Miniature p.c.b Relay

② Part No.

③ Contact Form: C=1C/O; A = N/O; B= N/C

④ Coil Voltage: 12D= 12Vdc 24D= 24Vdc

⑤ Ni= 0.36W coil power

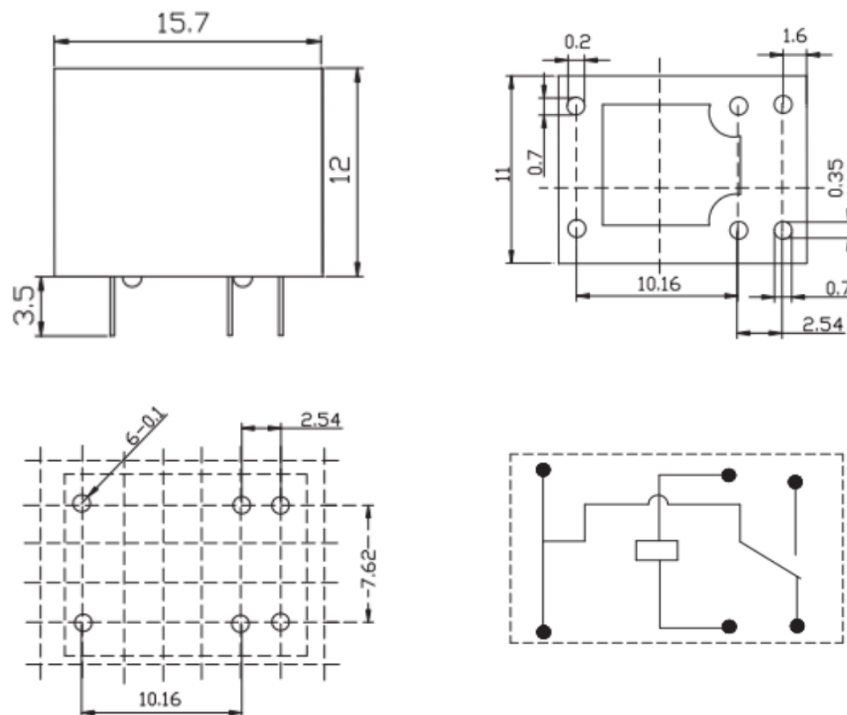
H= 0.20W coil power

**COIL DATA (at 20°C)**

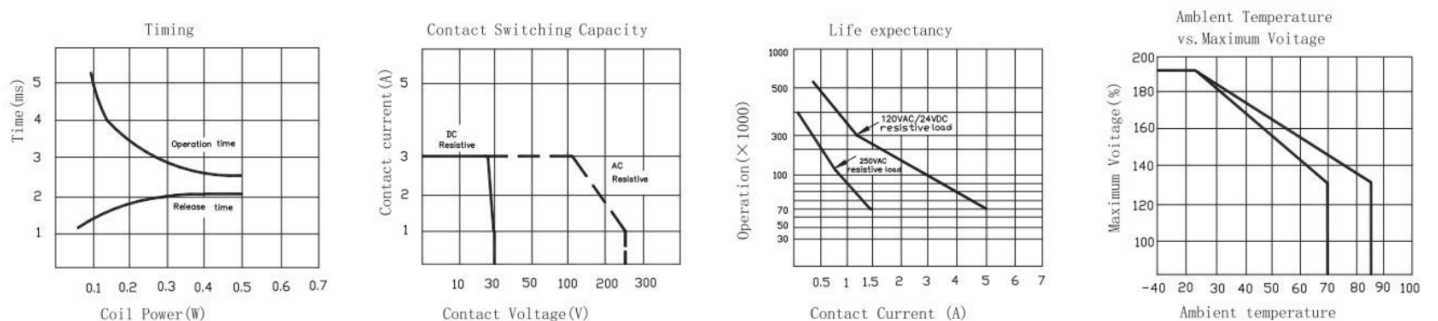
| Nominal Voltage (VDC) | Pick-up Voltage VDC(Max) | Drop-out Voltage VDC(Min) | Coil Resistance ( $\Omega$ ) $\pm$ 10% |                | Nominal operating Power (W) | Max.Allowable Voltage   |
|-----------------------|--------------------------|---------------------------|--|----------------|-----------------------------|-------------------------|
|                       |                          |                           | High Sensitive 0.20W                   | Standard 0.36W |                             |                         |
| 3                     | 2.25                     | 0.30                      | 45                                     | 25             | 0.20 / 0.36                 | 130% of nominal Voltage |
| 5                     | 3.75                     | 0.50                      | 125                                    | 69             |                             |                         |
| 6                     | 4.50                     | 0.60                      | 180                                    | 100            |                             |                         |
| 9                     | 6.75                     | 0.90                      | 405                                    | 225            |                             |                         |
| 12                    | 9.00                     | 1.20                      | 720                                    | 400            |                             |                         |
| 24                    | 18.00                    | 2.40                      | 2880                                   | 1600           |                             |                         |

**DIMENSIONS**

Unit: mm



**Reference Data 性能曲线图**



**Disclaimer:**

The specifications in this datasheet are for reference only and subject to change without notice. No chance for us to evaluate all the specifications and technical parameters for each possible application. The users will take the responsibility to choose the correct products for their own applications. While if any technical support is needed, please contact NCR team for assistance.