



Industrial & Electrical Components

# Miniature P.C.B Relay

Part No.

# NRP-27



- The dielectric voltage between the contact and the coil is 3kV.
- High sensitivity,coil power 0.12w
- 7A Contact switching capability
- Subminiature type

## CONTACT

Arrangement	1A
Contact Material	Silver Alloy
Contact Resistance (at 6VDC 1A)	100 mΩ
Rating	
Resistive load (Cos.φ=1)	7A 277VAC 7A 30VDC
Max. Switching Voltage	277VAC/30VDC
Max. Switching Current	7A
Max. Switching Power	1939VA/210W
Expected life	
Electrical	1×10 <sup>5</sup>
Mechanical	1×10 <sup>7</sup>

## CHARACTERISTICS

Operate Time	10ms Max
Release Time	5ms Max
Dielectric Strength	
Between contact and coil	AC 3000VAC 50/60Hz 1min
Between open contacts	AC 1000VAC 50/60Hz 1min
Insulation Resistance	Min.100MΩ (500 VDC)
Ambient temperature	-40~ 85°C
Humidity	5%~85%RH
Shock:	
Strength	980m/s <sup>2</sup>
Stabiility	98m/s <sup>2</sup>
Vibration	
Endurance	10 to 55 Hz ,1.5mm D.A.
Damage	10 to 55 Hz ,1.5mm D.A.
Unit weight	about 3g

## ORDERING INFORMATION

e.g

NRP-27 - A - 12D - S - 1

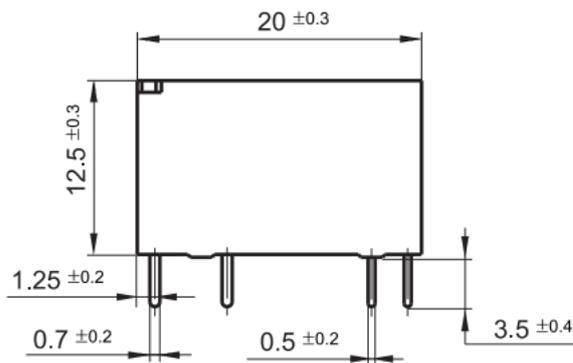
① ② ③ ④ ⑤ ⑥

- ① Series: Miniature P.C.B Relay
- ② Part No.
- ③ Contact Arrangement : A=N/O
- ④ Coil Rated Voltage: 12D=12VDC 24D=24VDC
- ⑤ Seal type: F=Flux proofed;S=Plastic Sealed
- ⑥ Pin distance: 1=5.08mm,2=7.62mm

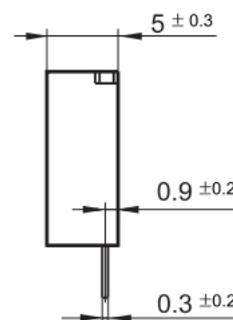
**COIL DATA (at 20°C)**

Nominal Voltage (VDC)	Pick-up Voltage VDC(Max)	Drop-out Voltage VDC(Min)	Coil Resistance (Ω)±10%		Nominal operating Power (W)	Max.Allowable Voltage
			High Sensitive 0.12W	Standard 0.18W		
5	3.50	0.50	208	139	0.12 / 0.18	130% of nominal Voltage
6	4.20	0.60	300	200		
9	6.30	0.90	675	450		
12	8.40	1.20	1200	800		
18	12.6	1.80	2700	1800		
24	16.8	2.40	4800	3200		

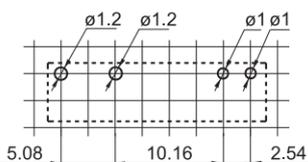
**DIMENSIONS (Unit: mm)**



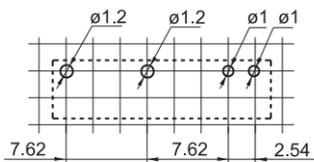
PCB Layout (Bottom view)



Wiring Diagram (Bottom View)



TYPE1

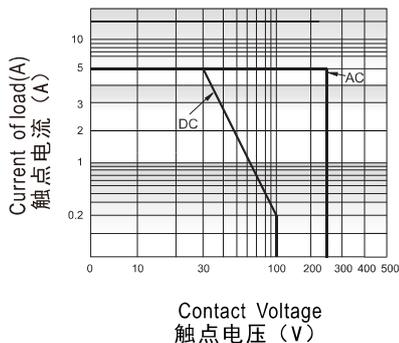


TYPE2

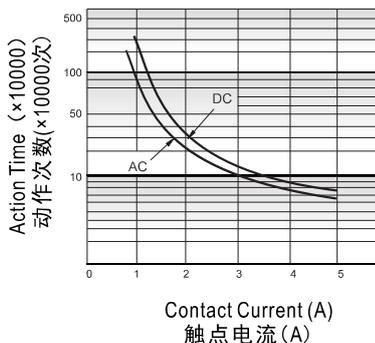


**Reference Data 性能曲线图**

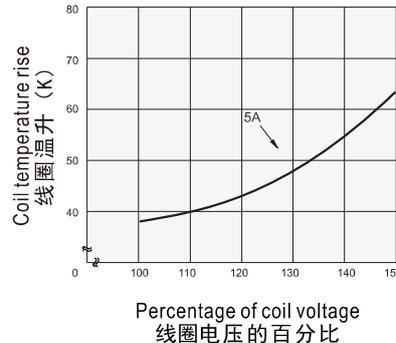
Max. operating power  
最大切换功率



Electric durability curve  
电耐久性曲线



Coil temperature rise  
线圈温升



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.