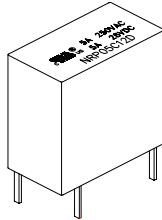# NCR

Industrial & Electrical Components

Miniature P.C.B Relay

Part No.

NRP-05E

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

CONTACT

Arrangemen	1A / 1B / 1C
Contact Material	Silver Alloy
Contact Resistive (At 6VDC, 1A)	100 mΩ
Rating Resistive load (cosφ=1)	10A 125VAC 5A 250VAC 1/6HP 277VAC NO/NC:5A/3A 30VDC
Max. Switching Voltage	250VAC 30VDC
Max. Switching Current	10A
Max. Switching Power	1250VA / 150W
Expected life	
Mechanical (10800 ops/Hour)	1×10^{7} Min
Electrical	1×10^{5} Min.
(1A: 5A 250VAC,Resistive load, Room temp., 1s ON 9s OFF)	
(1C: 5A/3A 250VAC,Resistive load, Room temp., 1s ON 9s OFF)	

CHARACTERISTICS

Operate Time		10ms. Max.
Release Time		5ms. Max.
Initial breakdown voltage		
Between Coil & Contact		4000VAC (50/60Hz)for 1 min.
Between Open Contacts		1000VAC (50/60Hz)for 1 min.
Insulation Resistance		Min.500MΩ (500 VDC)
Shock:	Endurance	$981 m/s^{2}$ Min
	Damage	$98.1 m/s^{2}$ Min
Vibration	Endurance	10 to 55 Hz ,1.5mm D.A.
	Damage	10 to 55 Hz ,1.5mm D.A.
Humidity		5%~85%RH
Ambient temperature		-40 to +85
Unit weight		7.5g

ORDERING INFORMATION

e.g

NRP	-	05E	-	C	-	12D	-	H

Series: Miniature p.c.b Relay

Part No.

Contact Form:

C=1C/O; A = N/O; B= N/C

Coil Voltage: 12D= 12Vdc

Nil= 0.40W coil power

H= 0.20W coil power

COIL DATA (at 20)

Nominal Voltage (VDC)	Pick-up Voltage VDC(Max)	Drop-out Voltage VDC(Min)	Coil Resistance (O)± 10%		Nominal operating Power (W)	Max.Allowable Voltage
			High Sensitive 0.20W	Standard 0.40W		
3	2.25	0.30	45.00	22.50		
5	3.75	0.50	125.00	62.50		
6	4.50	0.60	180.00	90.00	0.20 / 0.40	130% of nominal Voltage
9	6.75	0.90	405.00	202.50		
12	9.00	1.20	720.00	360.00		
24	18.00	2.40	2880.00	1440.00		

DIMENSIONS

Unit: mm
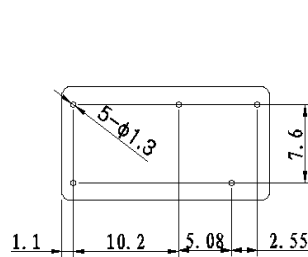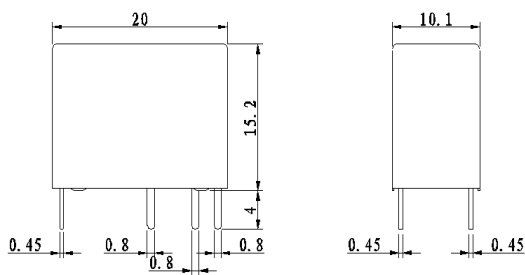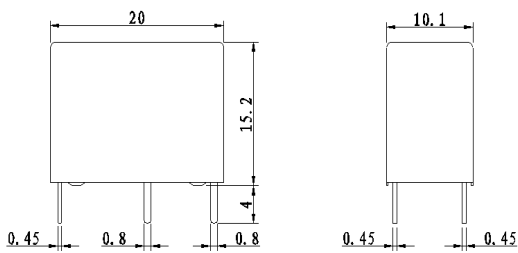
1C
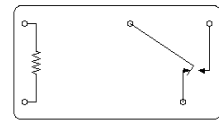
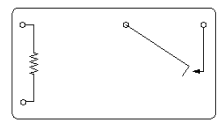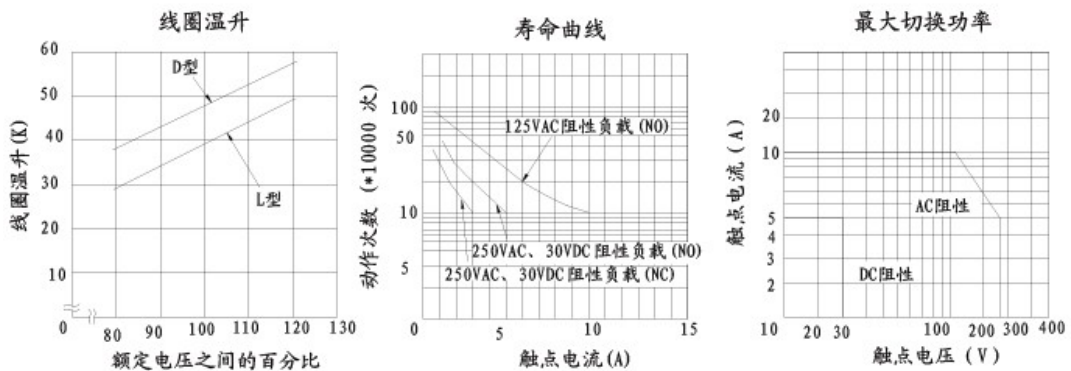PCB Layout (Bottom view)

Wiring Diagram (Bottom view)
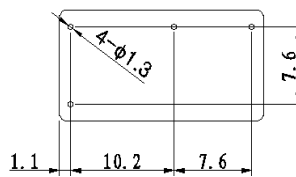
1A

PCB Layout (Bottom view)

Wiring Diagram (Bottom view)

Reference Data 性能曲线图

线圈温升

寿命曲线

最大切换功率

 www.nicerelay.com