

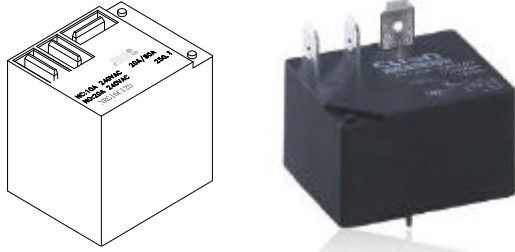


Industrial & Electrical Components

**P.C.B Power Relay**

Part No.

**NRP-16T**



32.4 × 27.5 × 28mm  
 32.4 × 27.5 × 20.5mm (Low profile type)  
 Heavy contact load  
 High reliability, Long life  
 Strong anti-shock and anti-vibration  
 PC board mounting or direct insert mounting

**CONTACT**

Arrangement	1A / 1B / 1C
Contact Material	Silver Alloy
Contact Resistive	50 mΩ
Rating	NO:40A/250VAC,30VDC
Resistive load (cosφ =1)	NC:30A/250VAC,30VDC (0.9W) 2HP 250VAC 1.5HP 250V
Max. Switching Voltage	110VDC 250VAC
Max. Switching Current	40A
Max. Switching Power	1100W 7200VA
Expected life	
Mechanical	1 × 10 <sup>6</sup> Min
Electrical	1 × 10 <sup>5</sup> Min.

**CHARACTERISTICS**

Operate Time	15ms. Max.
Release Time	10ms. Max.
Initial breakdown voltage	
Between Coil & Contact	2500VAC (50Hz)for 1 min.
Between Open Contacts	1500VAC (50Hz)for 1 min.
Insulation Resistance	Min.1000MO (500 VDC)
Shock:	Endurance
	Damage
	200m/s 11ms
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 +100 (125 )
Unit weight	36g

**ORDERING INFORMATION**

e.g

**NRP16T - C - 12D - B - L - H**

Part No. 16T= 40A version

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

Coil Voltage: 12D=12Vdc, 220A=220VAC

B= Class B F= Class F

Nil: Normally type, L: Lower profile type

Coil Power, H=0.6W, Nil = 0.9W (DC)

Nil = 2VA (AC)

**COIL DATA (at 20 )**

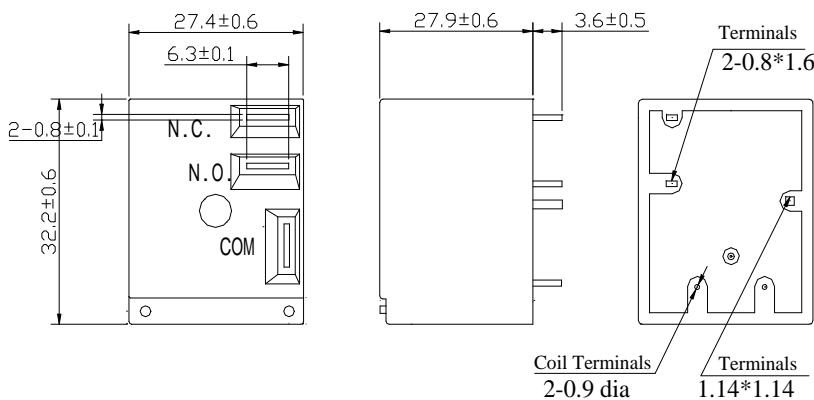
AC Coil Parameter									
Dash numbers	Rated voltage VAC		Rated current mA	Coil resistance $\Omega \pm 10\%$	Pick up voltage VAC(max) (75% of rated voltage)	Release voltage VAC(min) (30% of rated voltage)	Coil power	Operate Time ms	Release Time ms
	Rated	Max							
012AC	12	15.6	187	27	9.0	3.6	2VA	—	—
024AC	24	31.2	95	120	18.0	7.2			
110AC	110	143	20	2360	82.5	33.0			
120AC	120	156	16.5	3040	90.0	36.0			
220AC	220	286	6.4	13490	165.0	66.0			

DC Coil Parameter									
Dash numbers	Coil voltage V		Coil resistance $\Omega \pm 10\%$	Pick up voltage VDC(max) (75% of rated voltage)	Release voltage VDC(min) (10% of rated voltage)	Coil power W	Operate Time ms	Release Time ms	
	Rated	Max.							
003-900	3	3.9	10	2.25	0.3	0.9	<15	<10	
005-900	5	6.5	28	3.75	0.5				
006-900	6	7.8	40	4.50	0.6				
009-900	9	11.7	90	6.75	0.9				
012-900	12	15.6	160	9.00	1.2				
015-900	15	19.5	250	10.25	1.5				
018-900	18	23.4	360	13.50	1.8				
024-900	24	31.2	640	18.00	2.4				
048-900	48	62.4	2560	36.00	4.8				
110-900	110	143	13445	82.50	11.0				

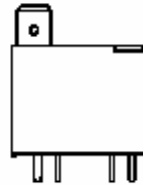
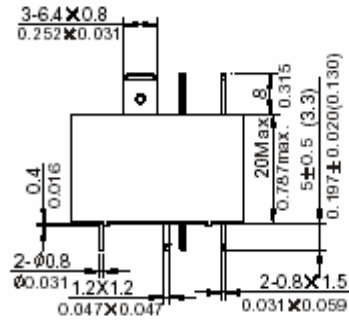
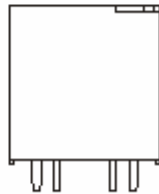
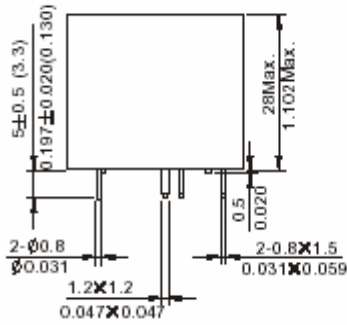
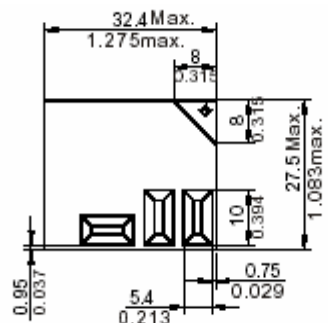
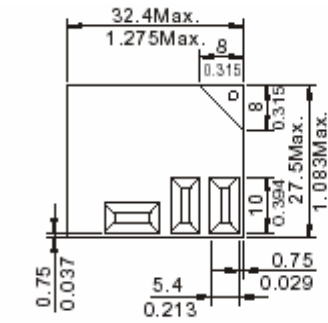
003-600	3	3.9	15	2.25	0.3	0.6	<15	<10
005-600	5	6.5	42	3.75	0.5			
006-600	6	7.8	60	4.50	0.6			
009-600	9	11.7	135	6.75	0.9			
012-600	12	15.6	240	9.00	1.2			
015-600	15	19.5	375	10.25	1.5			
018-600	18	23.4	540	13.50	1.8			
024-600	24	31.2	960	18.00	2.4			
048-600	48	62.4	3840	36.00	4.8			
110-600	110	143	20167	82.50	11.0			

**DIMENSIONS**

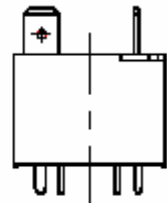
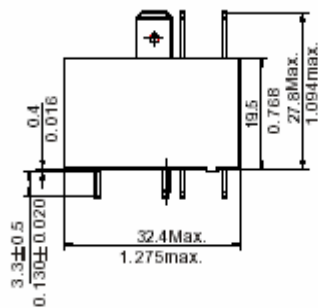
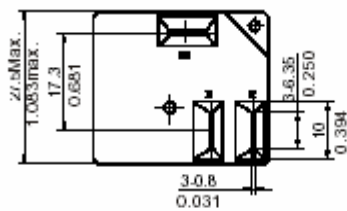
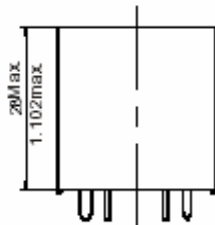
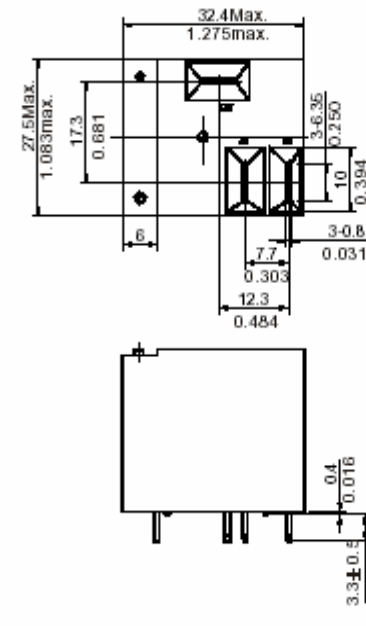
Unit: mm



NRP16T



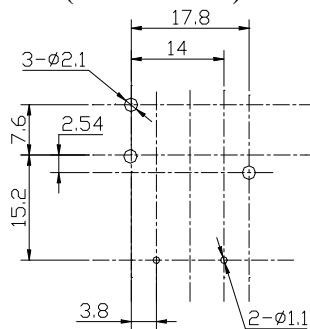
NRP-16T-xxx-L (low profile type 1)



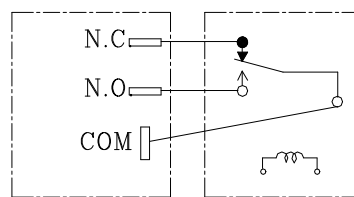
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NRP16T-xxx-L (low profile type 2)

PC board pattern  
(Bottom View)



Schematic



Top View

Bottom View