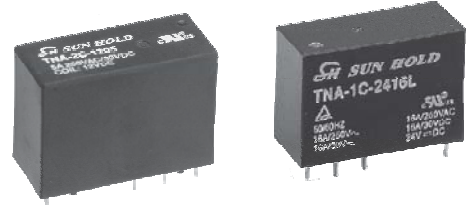
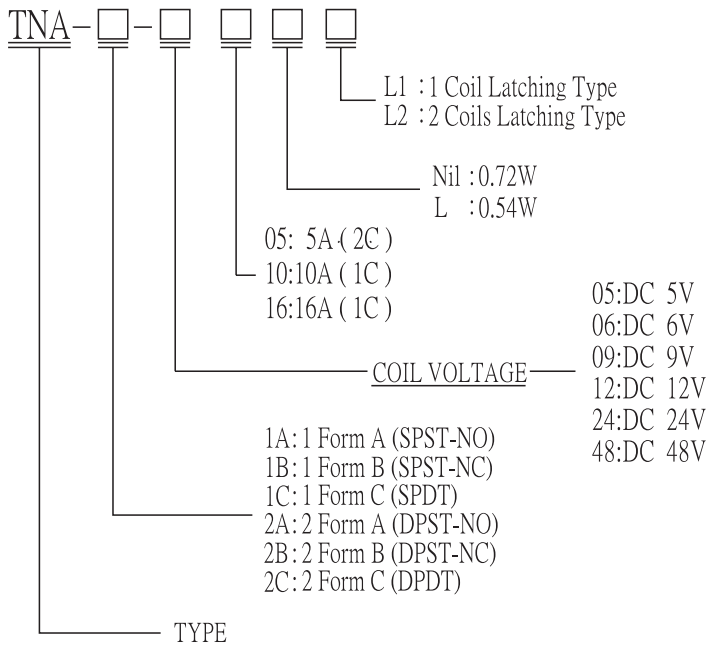


TNA SERIES

ORDERING INFORMATION



FEATURES:

- UL & TUV safety approval.
- Plastic sealed type is available for washing procedure.
- 2 pole 5A, 1 pole 10A & 16A.
- Dielectric strength: 5,000VAC.

COIL RATING(at 20°C)

NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -10N(W)	NOMINAL CURRENT (mA)(±10%)	PULL IN VOLTAGE (VDC)	DROP OUT VOLTAGE (VDC)	MAX ALLOWABLE VOLTAGE (VDC)
3V	12.5Ω	0.72W	240.0mA	75% MAX.	5% MIN.	110%
5V	36.0Ω		138.9mA			
6V	50.0Ω		120.0mA			
9V	115.0Ω		78.3mA			
12V	200.0Ω		60.0mA			
24V	820.0Ω		29.2mA			
48V	3300.0Ω		14.5mA			

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -10N(W)	NOMINAL CURRENT (mA)(±10%)	PULL IN VOLTAGE (VDC)	DROP OUT VOLTAGE (VDC)	MAX ALLOWABLE VOLTAGE (VDC)
L	3V	17Ω	0.54W	176.4mA	80% MAX.	5% MIN.	110%
	5V	50Ω		100.0mA			
	6V	68Ω		88.2mA			
	9V	155Ω		58.1mA			
	12V	270Ω		44.4mA			
	24V	1100Ω		21.8mA			
	48V	4400Ω		10.9mA			

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)(±10%)	POWER CONSUMPT -10N(W)	NOMINAL CURRENT (mA)(±10%)	SET/RESET VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
L1	3V	22.5Ω	0.40W	133.3mA	80% MAX.	110%
	5V	62.5Ω		80.0mA		
	6V	90Ω		66.6mA		
	12V	360Ω		33.3mA		
	24V	1440Ω		16.6mA		

	NOMINAL VOLTAGE (VDC)	COIL RESISTANCE (Ω)($\pm 10\%$)	POWER CONSUMPT -ION(W)	NOMINAL CURRENT (mA)($\pm 10\%$)	SET/RESET VOLTAGE (VDC)	MAX. ALLOWABLE VOLTAGE (VDC)
L2	3V	15 Ω	0.6W	200mA	80% MAX.	110%
	5V	42 Ω		120mA		
	6V	60 Ω		100mA		
	12V	240 Ω		50mA		
	24V	886 Ω		25mA		

PERFORMANCE(at initial value)

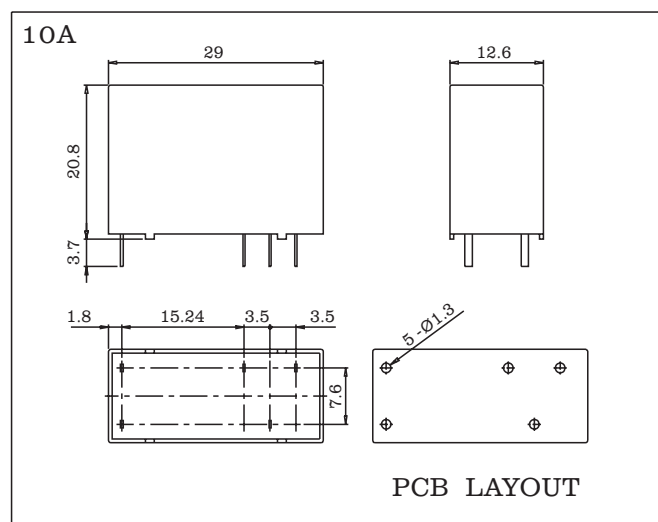
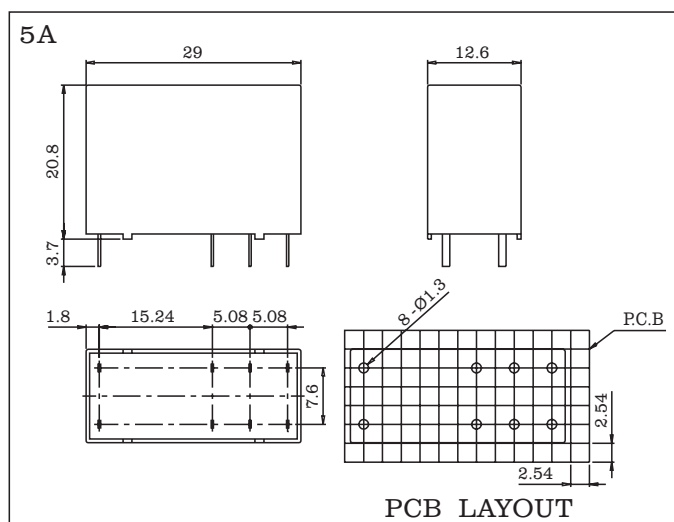
Item	Type	5A(2c)	10A(1c)	16A(1c)
Contact Resistance		100m Ω Max. (Initial value)		
Operate Time		15msec Max.		
Release Time		8msec Max.		
Dielectric Strength between coil & contact between contact		AC5000V(1min) AC1000V(1min)		
Insulation Resistance		1000M Ω Min.(DC500V)		
Operating Ambient Temperature		-30°C ~ +70°C		
Humidity		35 to 85% RH		
Vibration Resistance		10G (10~55Hz)(Dual amplitude:1.5mm)		
Shock Resistance		10G		
Life Expectancy Mechanically Electrically		10,000,000 ops. Min.(1800 ops./h) 100,000 ops. Min.(1200 ops./h)		
Weight		13g(approx.)		

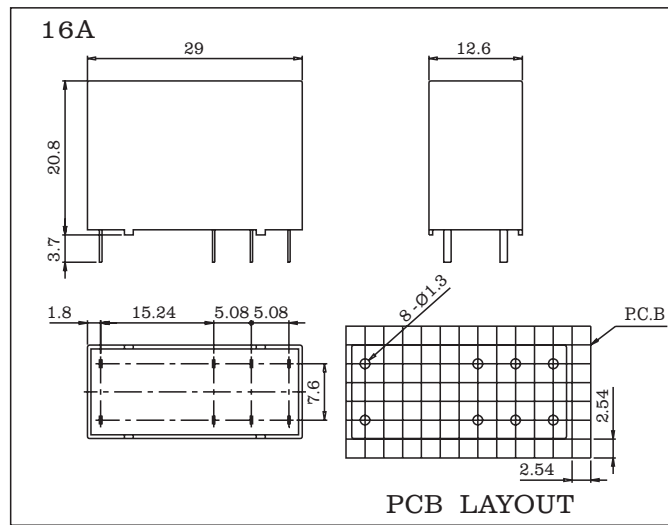
CONTACT RATING

Item	Type	5A(2c)	10A(1c)	16A(1c)
Rated Carrying Current		AC250V 5A DC30V 5A	AC250V 10A DC30V 10A	AC250V 16A DC30V 16A
Max. Allowable Current		5A	10A	16A
Max. Allowable Voltage		AC 250V DC 150V		
Max. Current(continual)		5A	10A	16A
Max. Allowable Power		1250VA,120W	2500VA,300W	3840VA,480W
Contact Material		Ag Alloy		

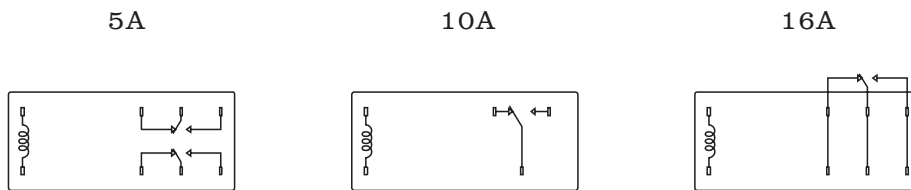
STANDARD

DIMENSIONS(Unit:mm)



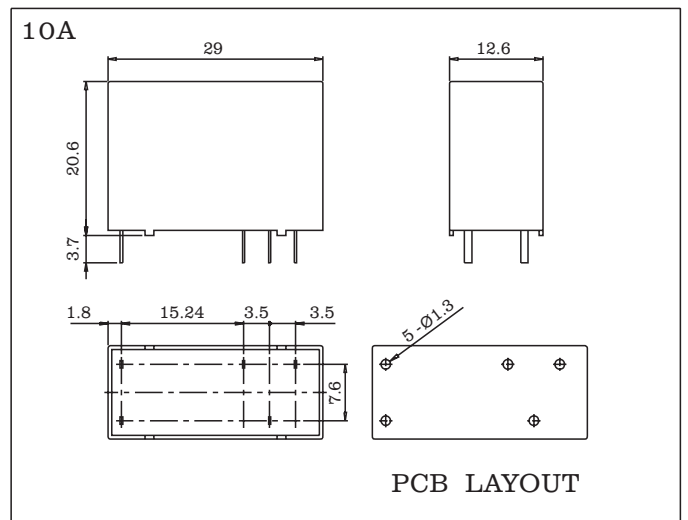
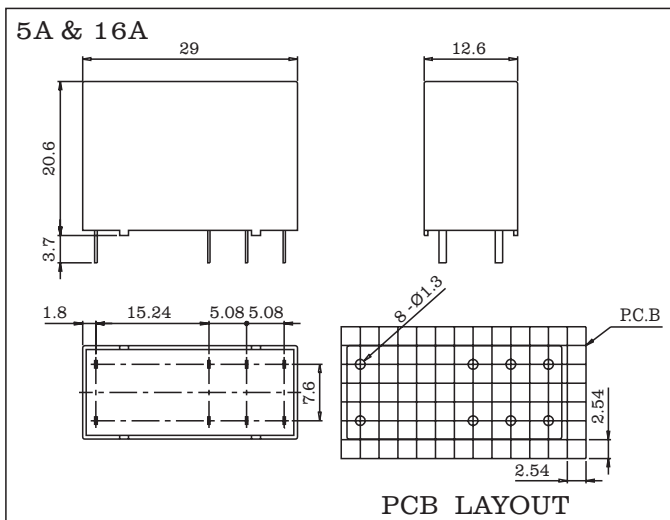


WIRING DIAGRAMS(Bottom View)

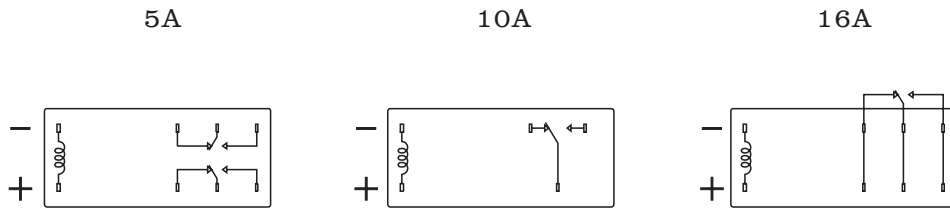


L1 TYPE (1 Coil Latching)

DIMENSIONS(Unit:mm)

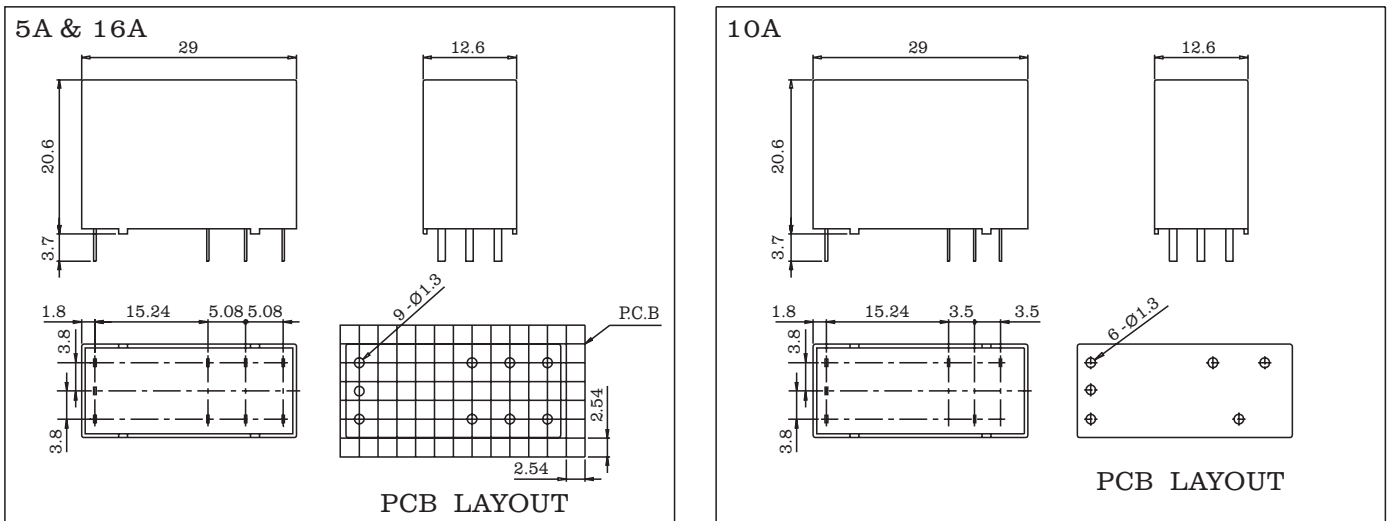


WIRING DIAGRAMS(Bottom View)



L2 TYPE (2 Coils Latching)

DIMENSIONS(Unit:mm)



WIRING DIAGRAMS(Bottom View)

