

**SERIES:** PR23 | **DESCRIPTION:** POWER RELAY

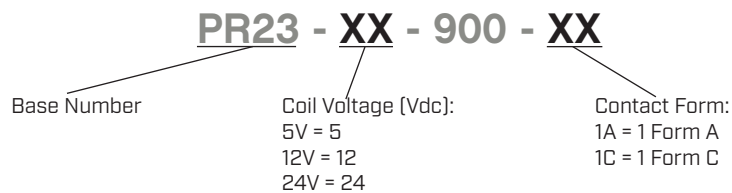
**FEATURES**

- 5V/12V/24V
- SPST & SPDT
- 900 mW


**MODEL**

	coil voltage typ (Vdc)	coil resistance ( $\Omega \pm 10\%$ )	operating voltage		release voltage max (Vdc)	coil power max (mW)
			min (Vdc)	max		
PR23-5V-900-1A	5	27.8	3.5	0.5	900	
PR23-12V-900-1A	12	160	8.4	1.2	900	
PR23-24V-900-1A	24	640	16.8	2.4	900	
PR23-5V-900-1C	5	27.8	3.5	0.5	900	
PR23-12V-900-1C	12	160	8.4	1.2	900	
PR23-24V-900-1C	24	640	16.8	2.4	900	

Notes: 1. All specifications are measured at 23°C unless otherwise specified.

**PART NUMBER KEY**


## CONTACT SPECIFICATIONS

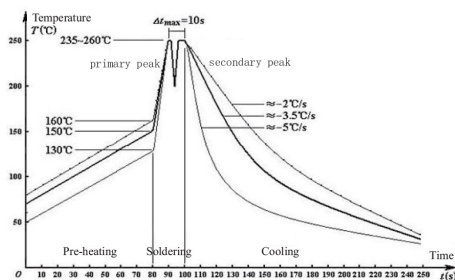
parameter	conditions/description	min	typ	max	units
contact form	1 Form A, 1 Form C				
contact material	Ag alloy				
contact rating	1 Form A: 30 A @ 125 Vac, 30 A @ 24 Vdc 1 Form C: NO/NC: 20 A / 15 A @ 125 Vac, 20 A / 15 A @ 24 Vdc				
contact resistance	at 6 Vdc, 1.0 A			100	mΩ
max switching voltage				250 28	Vac Vdc
max switching current				30	A
max switching power				7,500 560	VA W
min switching load	5 Vdc, 100 mA				
life	electrical mechanical		100,000 10,000,000		operations operations

## GENERAL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
insulation resistance	at 500 Vdc	1,000			MΩ
dielectric strength	between open contacts for 1 minute between coil and contacts for 1 minute		1,500 2,500		Vac Vac
operate time				15	ms
release time				10	ms
shock resistance	endurance misoperation		1,000 100		m/s <sup>2</sup> m/s <sup>2</sup>
vibration resistance	endurance: 10~55 Hz, 1.5 mm double amplitude misoperation: 10~55 Hz, 1.5 mm double amplitude				
operating temperature		-40		85	°C
humidity	at 40°C	35		95	%RH
weight			27.0		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	tray: 50 pcs per tray carton size: 438 x 345 x 241 mm carton QTY: 500 pcs per carton				

## SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for 3.5±0.5 seconds	340	350	360	°C
wave soldering	for 10±1 seconds	255	260	265	°C

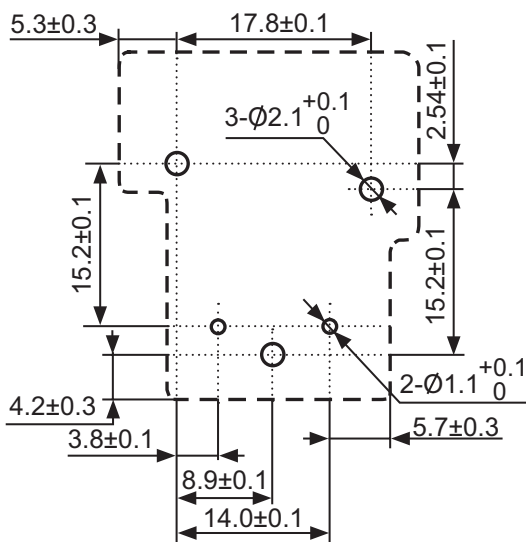
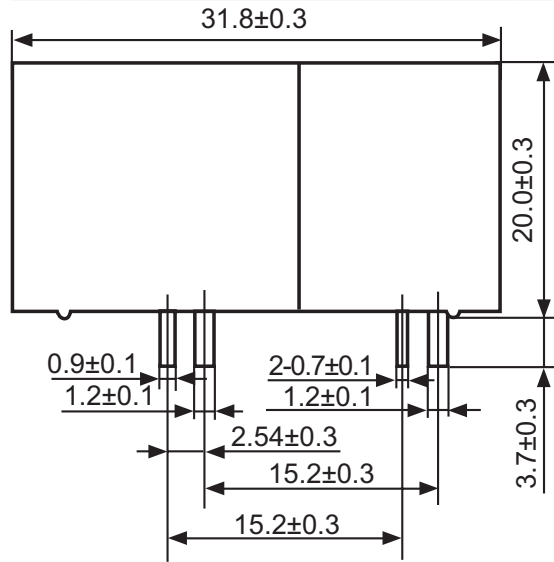
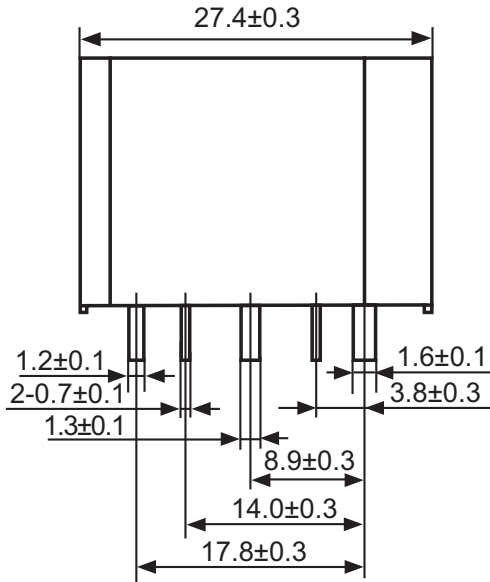


Double-wave Soldering Curve

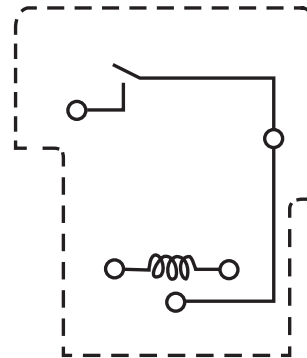
## MECHANICAL DRAWING (1A = 1 FORM A)

units: mm  
 tolerance:  $\pm 0.3$  mm  
 unless otherwise noted

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
A	housing	PBT [UL94V-0]	black
B	terminals	copper covered steel	tin



Recommended PCB Layout  
 Bottom View

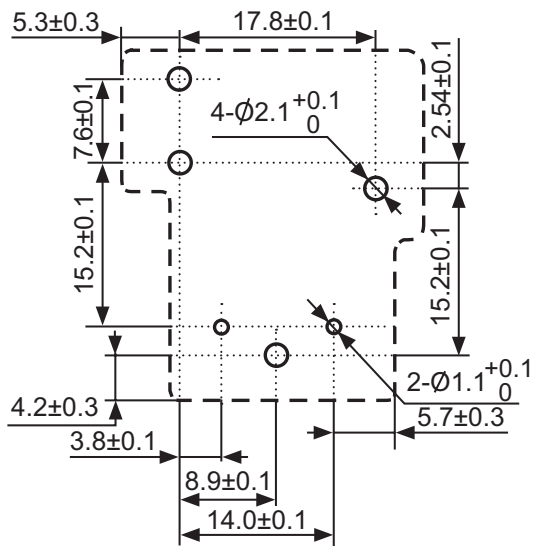
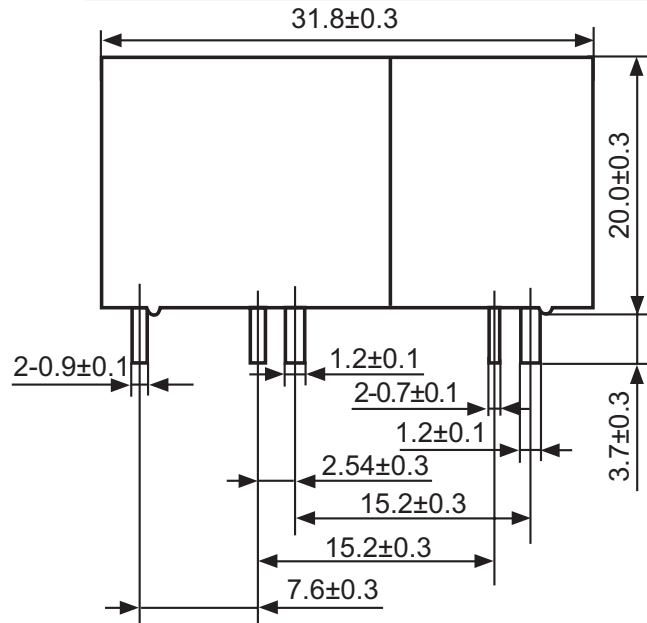
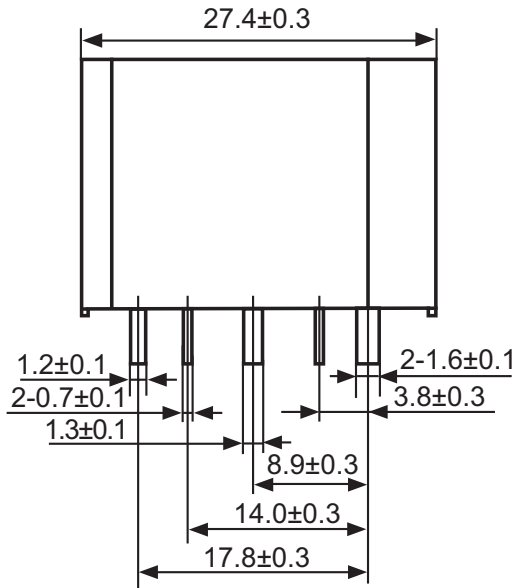


Wiring Diagram  
 Bottom View

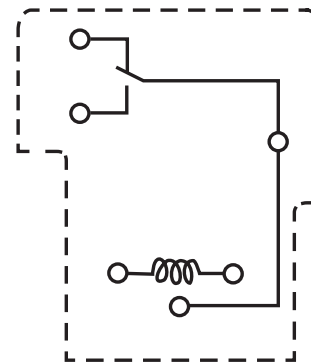
## MECHANICAL DRAWING (1C = 1 FORM C)

units: mm  
 tolerance:  $\pm 0.3$  mm  
 unless otherwise noted

ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
A	housing	PBT [UL94V-0]	black
B	terminals	copper covered steel	tin



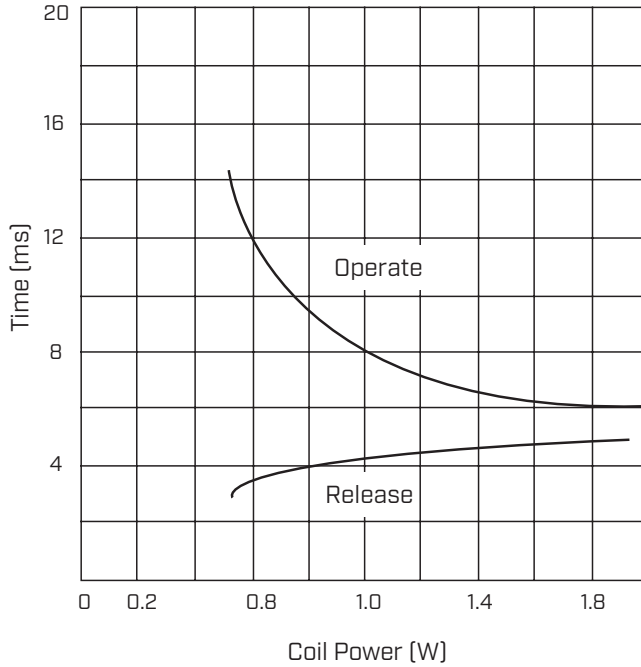
Recommended PCB Layout  
 Bottom View



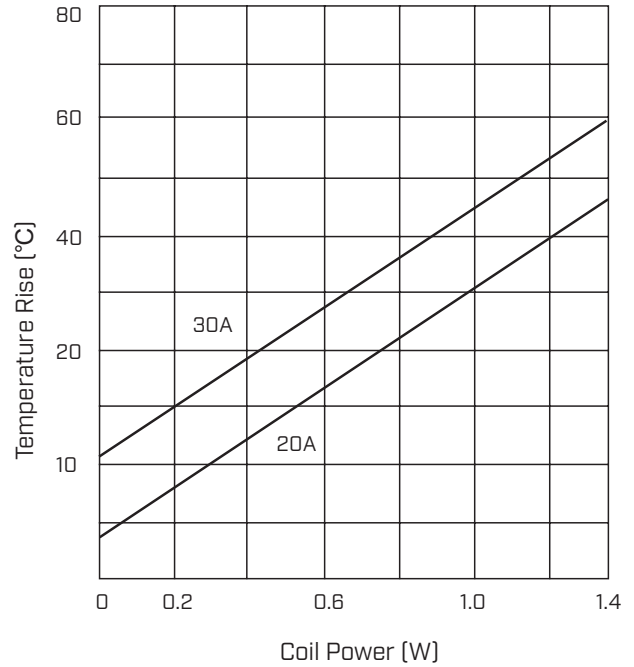
Wiring Diagram  
 Bottom View

## CHARACTERISTIC CURVES

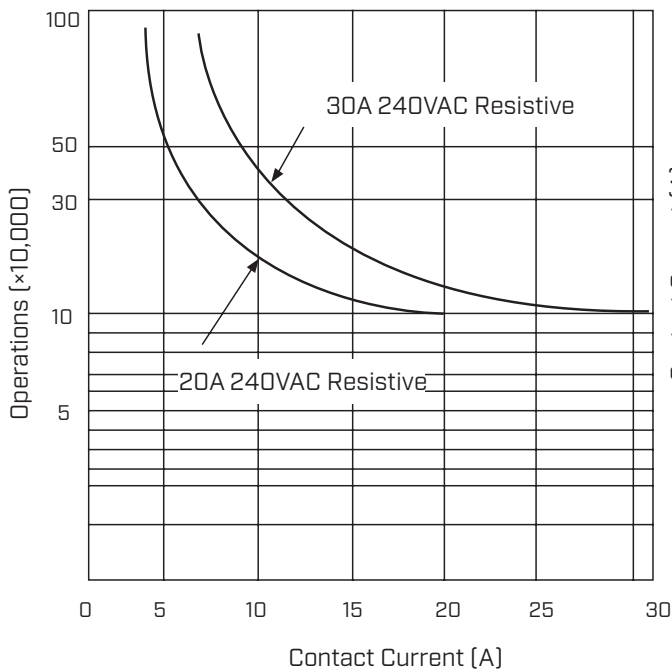
Time Curve



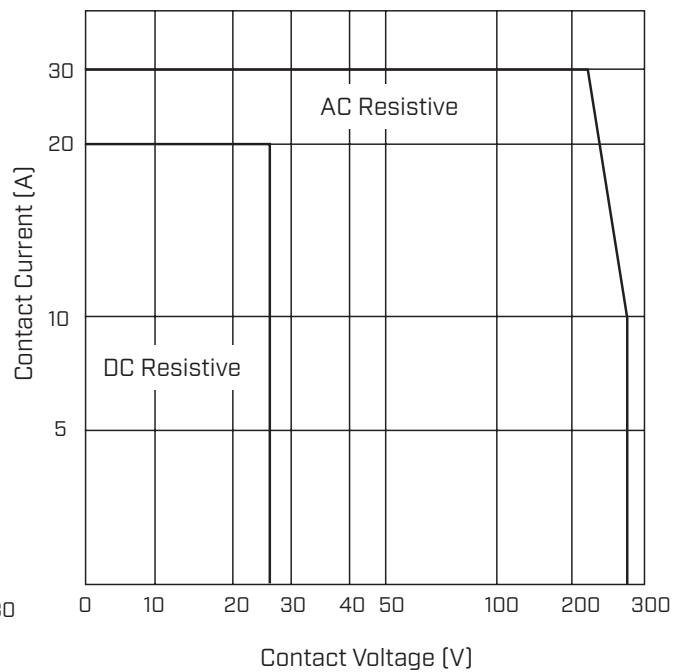
Coil Temperature Rise



Life Curve



Maximum Switching Power



## REVISION HISTORY

rev.	description	date
1.0	initial release	08/15/2022

The revision history provided is for informational purposes only and is believed to be accurate.



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