

SERIES: PR21 | **DESCRIPTION:** POWER RELAY

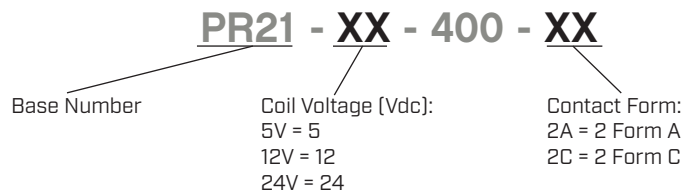
FEATURES

- 5V/12V/24V
- DPST & DPDT
- 400 mW


MODEL

	coil voltage typ (Vdc)	coil resistance ($\Omega \pm 10\%$)	operating voltage		release voltage		coil power max (mW)
			min (Vdc)	max (Vdc)	min (Vdc)	max (Vdc)	
PR21-5V-400-2A	5	62.5	3.5		0.5		400
PR21-12V-400-2A	12	360	8.4		1.2		400
PR21-24V-400-2A	24	1,440	16.8		2.4		400
PR21-5V-400-2C	5	62.5	3.5		0.5		400
PR21-12V-400-2C	12	360	8.4		1.2		400
PR21-24V-400-2C	24	1,440	16.8		2.4		400

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

PART NUMBER KEY


CONTACT SPECIFICATIONS

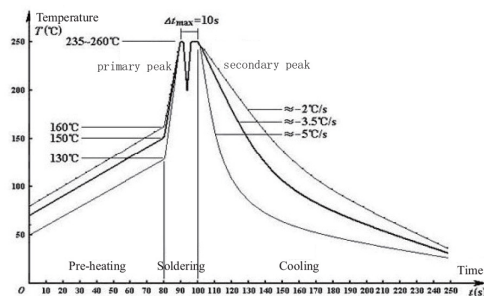
parameter	conditions/description	min	typ	max	units
contact form	2 Form A, 2 Form C				
contact material	Ag alloy				
contact rating	8 A @ 250 Vac 8 A @ 30 Vdc				
contact resistance	at 6 Vdc, 1.0 A			100	mΩ
max switching voltage				440 120	Vac Vdc
max switching current				8	A
max switching power				2,000 240	VA W
min switching load	5 Vdc, 100 mA				
life	electrical mechanical		100,000 20,000,000		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		1,000 5,000		Vac Vac
operate time				10	ms
release time				5	ms
shock resistance	endurance misoperation		1,000 100		m/s ² m/s ²
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			13.0		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	tube: 25 pcs per tube carton size: 388 x 360 x 154 mm carton QTY: 1,000 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

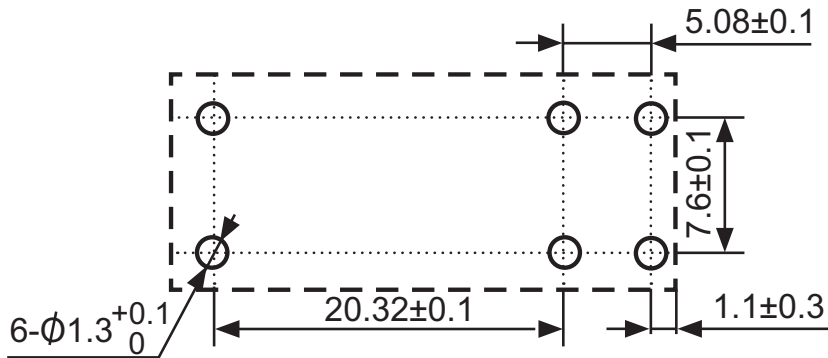
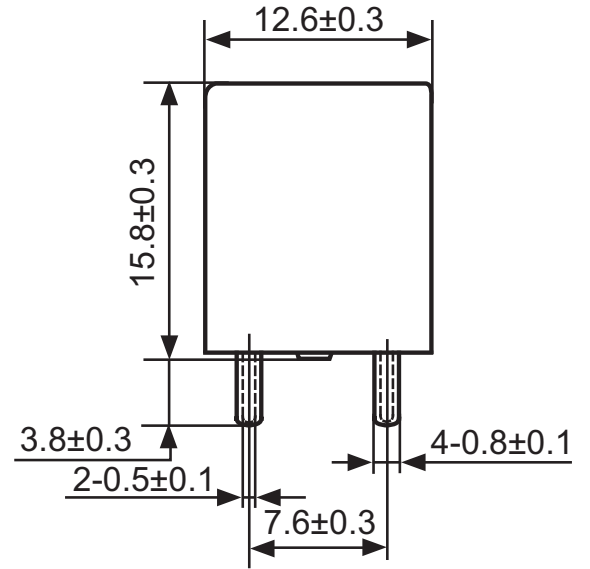
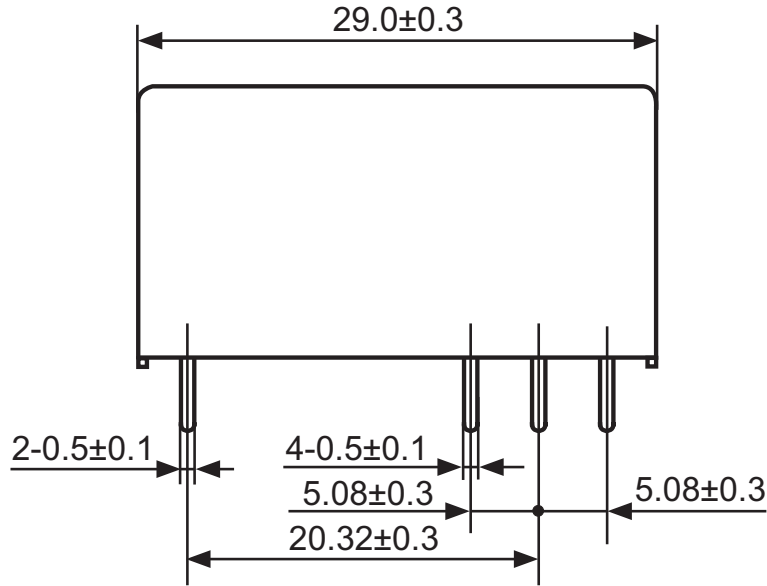


Double-wave Soldering Curve

MECHANICAL DRAWING (2A = 2 FORM A)

units: mm
 tolerance: ± 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

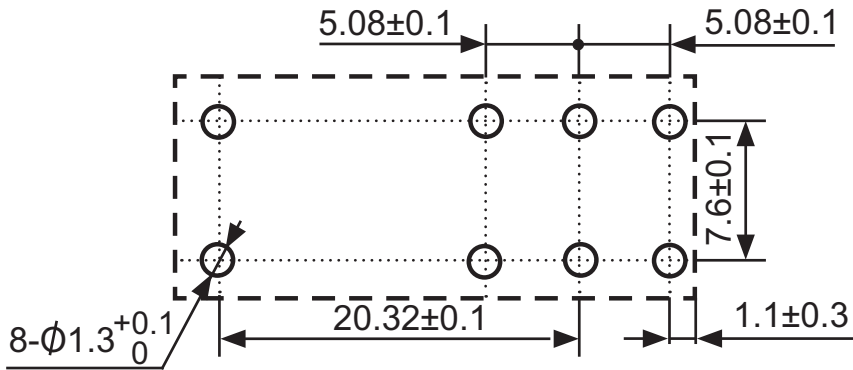
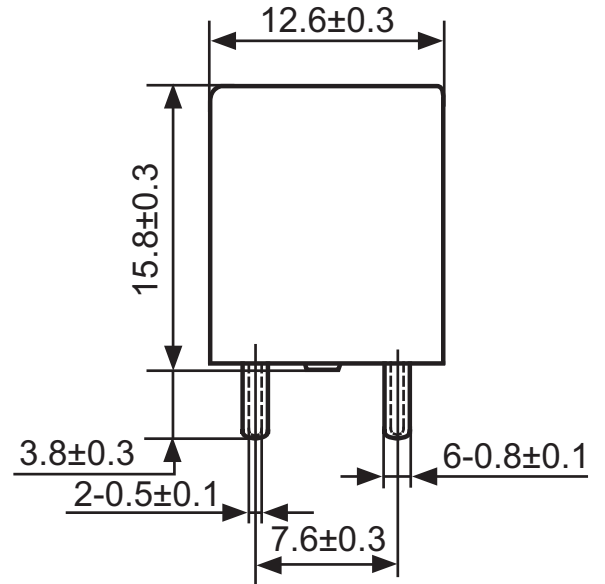
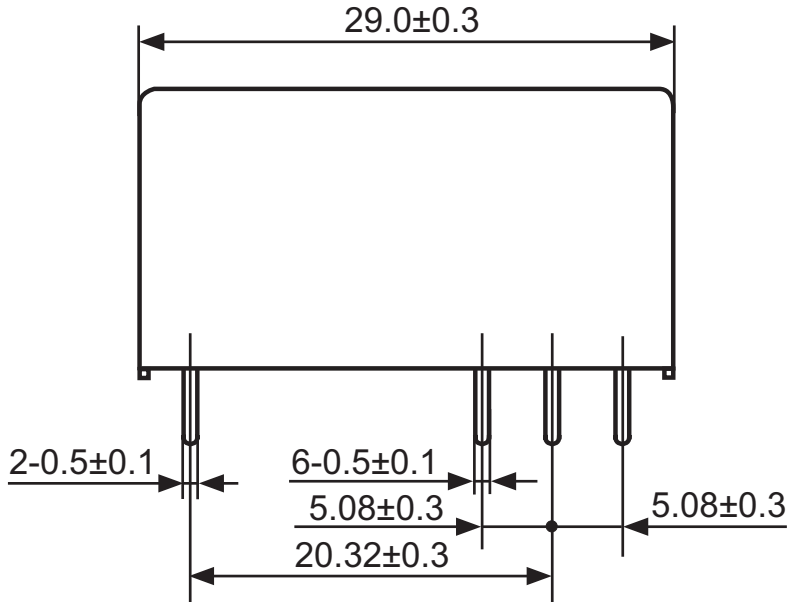


Wiring Diagram
 Bottom View

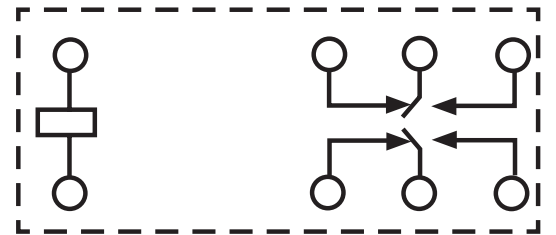
MECHANICAL DRAWING (2C = 2 FORM C)

units: mm
 tolerance: ± 0.3 mm
 unless otherwise noted

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



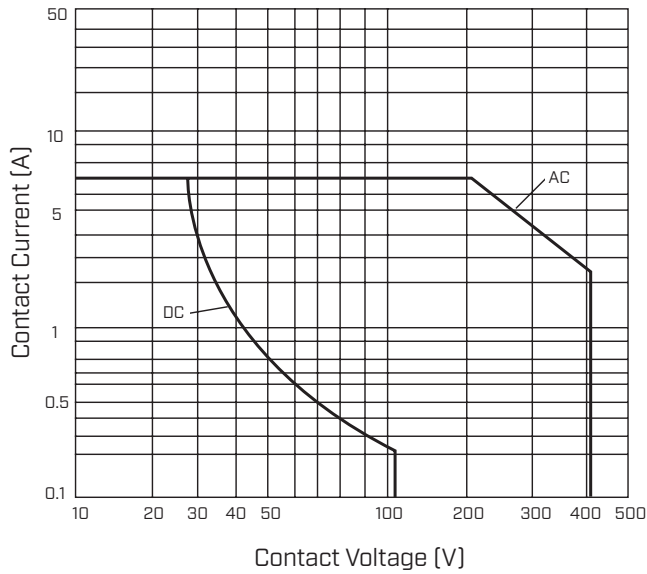
Recommended PCB Layout
 Bottom View



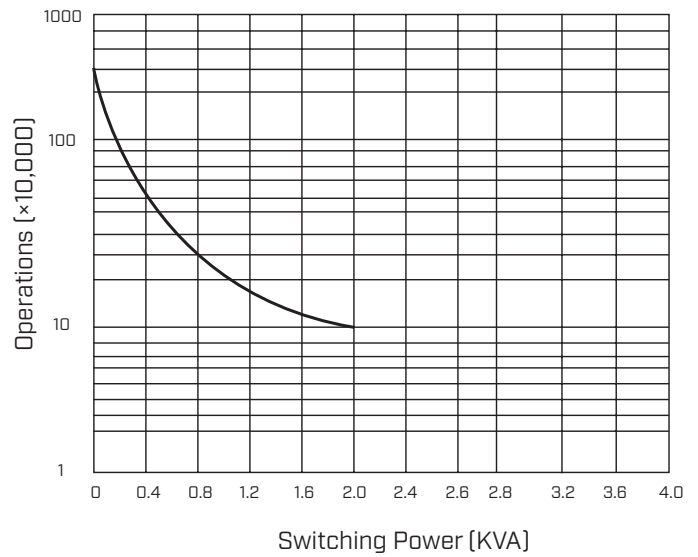
Wiring Diagram
 Bottom View

CHARACTERISTIC CURVES

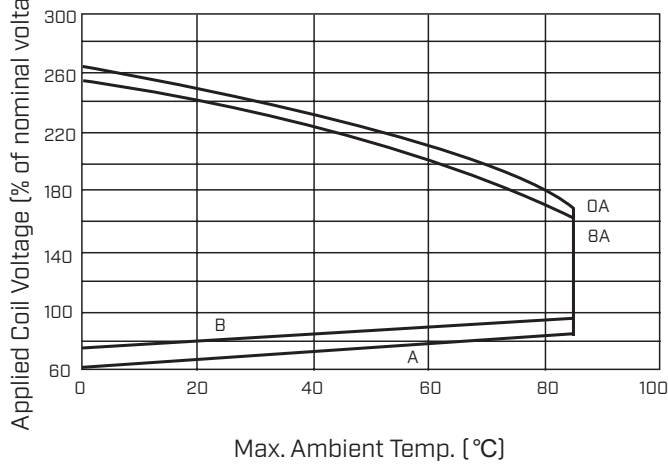
Maximum Switching Power



Life Curve



Max Ambient Temp. Vs. Coil Voltage



A: Coil Temperature = Ambient Temperature
 B: 110% of nominal coil voltage at rated contact load

REVISION HISTORY

rev.	description	date
1.0	initial release	08/09/2022

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



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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