CUDEVICES

SERIES: PR2 | DESCRIPTION: POWER RELAY

FEATURES

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



MODEL

	coil voltage typ (Vdc)	coil resistance (Ω±10%)	operating voltage 1 Form A min (Vdc)	operating voltage 1 Form C min (Vdc)	release voltage max (Vdc)	coil power max (mW)
PR2-5V-450-1A	5	55	3.5	3.5	0.5	450
PR2-12V-450-1A	12	320	8.4	8.4	1.2	450
PR2-24V-450-1A	24	1,280	16.8	16.8	2.4	450
PR2-5V-450-1C	5	55	3.5	3.5	0.5	450
PR2-12V-450-1C	12	320	8.4	8.4	1.2	450
PR2-24V-450-1C	24	1,280	16.8	16.8	2.4	450

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

PART NUMBER KEY

PR2 - XX - 450 - XX

- PR2 — Base Number
- XX — Coil Voltage (Vdc): 5V = 5, 12V = 12, 24V = 24
- XX — Contact Form: 1A = 1 Form A, 1C = 1 Form C

CONTACT SPECIFICATIONS

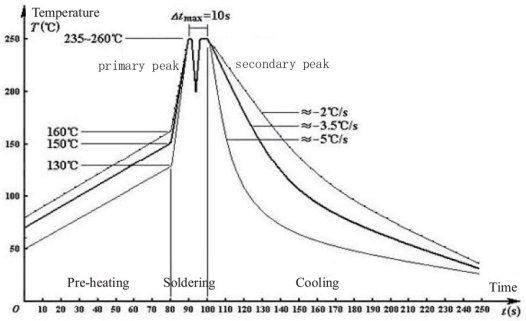
parameter	conditions/description	min	typ	max	units
contact form	1 Form A, 1 Form C				
contact material	Ag alloy				
contact rating	1 Form A: 5 A @ 250 Vac, 5 A @ 28 Vdc 1 Form C: NO/NC: 5 A / 3 A @ 250 Vac, 5 A / 3 A @ 28 Vdc				
contact resistance	at 6 Vdc, 1.0 A			100	mΩ
max switching voltage				250 28	Vac Vdc
max switching current				10	A
max switching power				1,250 280	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 1A= between coil and contacts for 1 minute 1C= between coil and contacts for 1 minute		1,000 3,500 2,500		Vac 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			6.0		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	box: 100 pcs per box carton size: 284 x 250 x 180 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

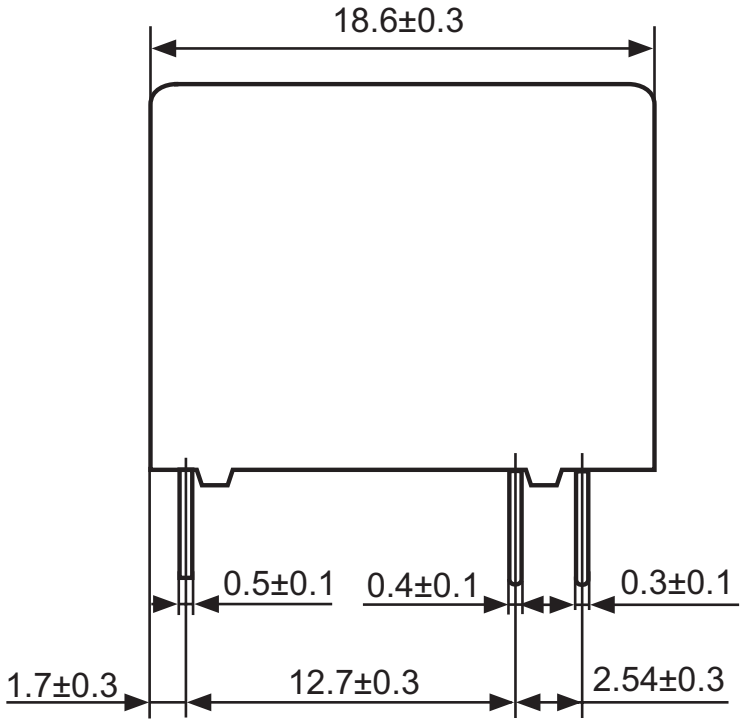


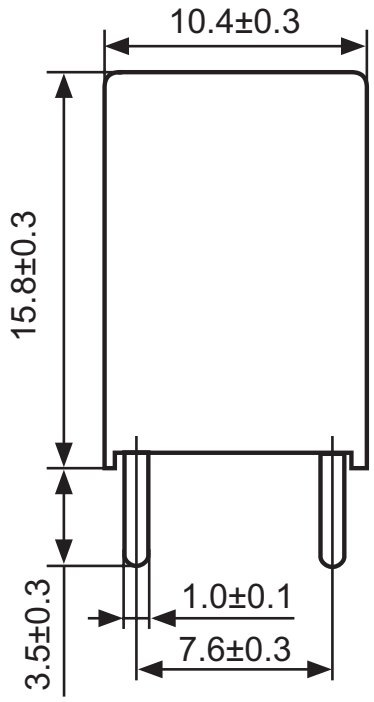
Double-wave Soldering Curve

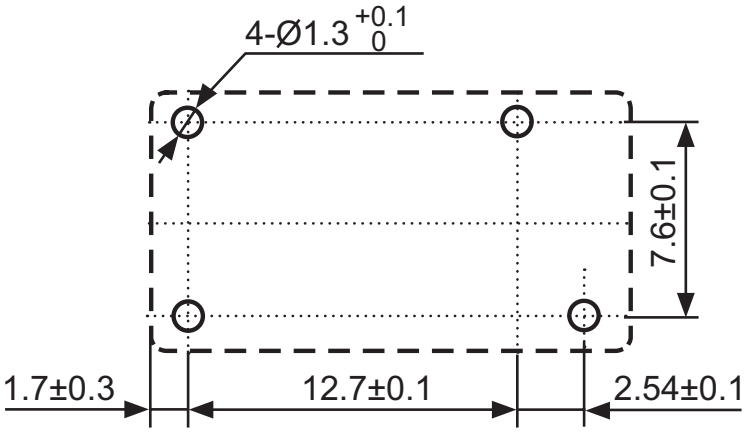
MECHANICAL DRAWING (1A = 1 FORM A)

units: mm
tolerance: ±0.3 mm
unless otherwise noted

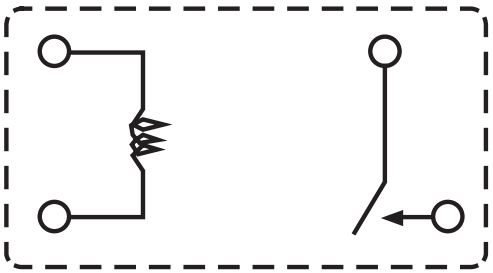
ITEM	DESCRIPTION	MATERIAL	PLATING/COLOR
A	housing	PBT (UL94V-0)	black
B	terminals	copper covered steel	tin







Recommended PCB Layout
Bottom View

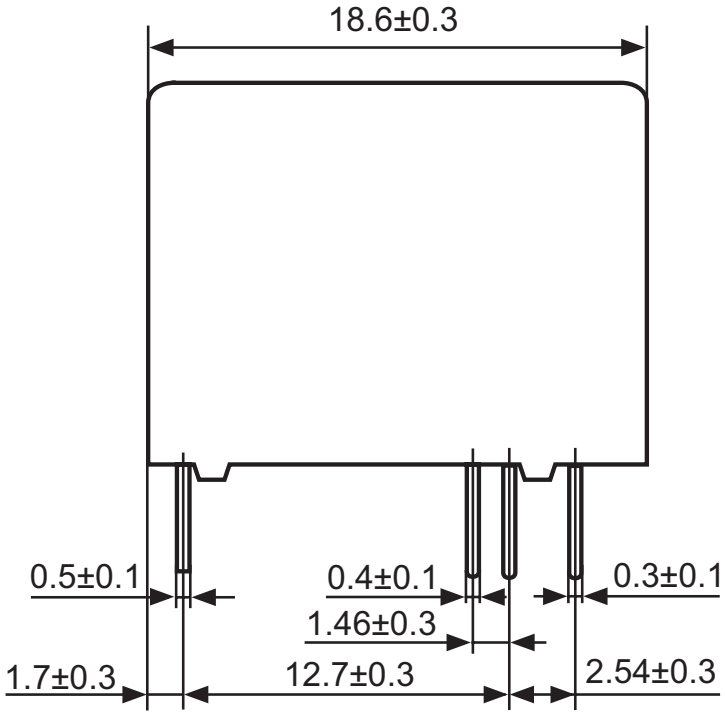


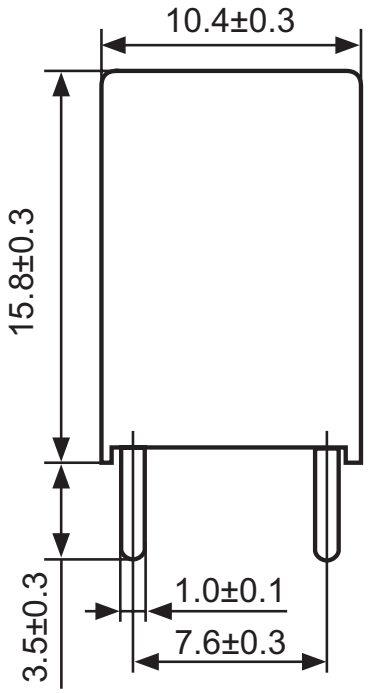
Wiring Diagram
Bottom View

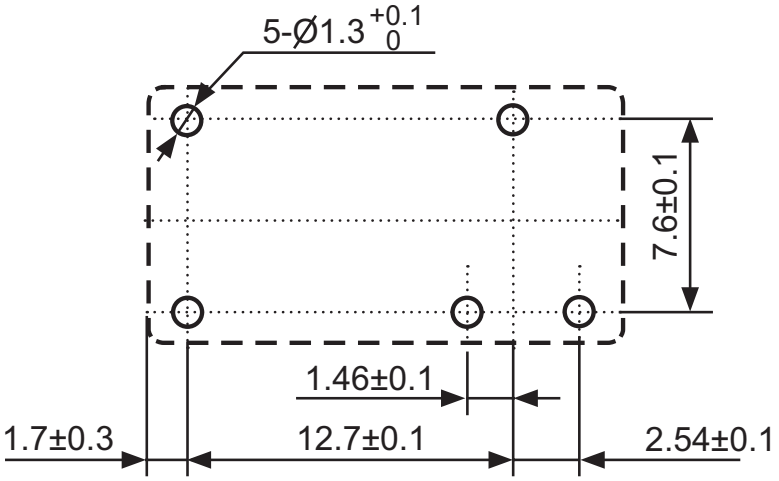
MECHANICAL DRAWING (1C = 1 FORM C)

units: mm
tolerance: ±0.3 mm
unless otherwise noted

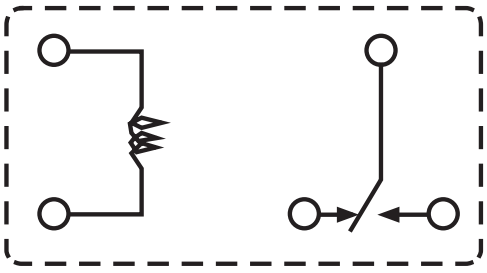
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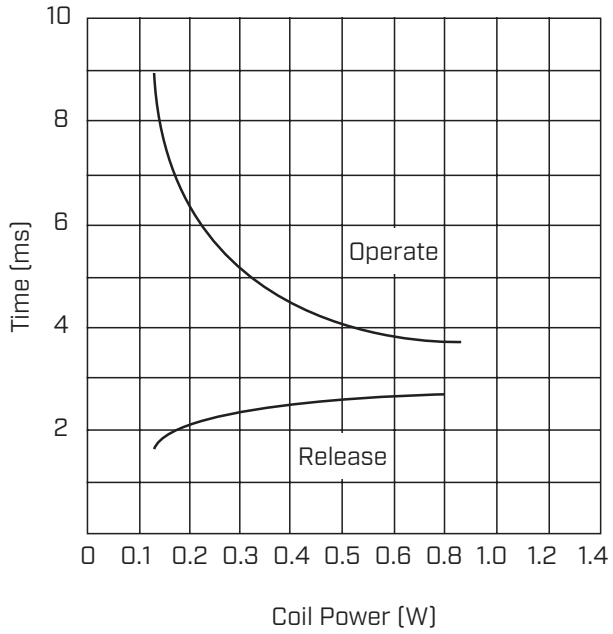
Recommended PCB Layout
Bottom View



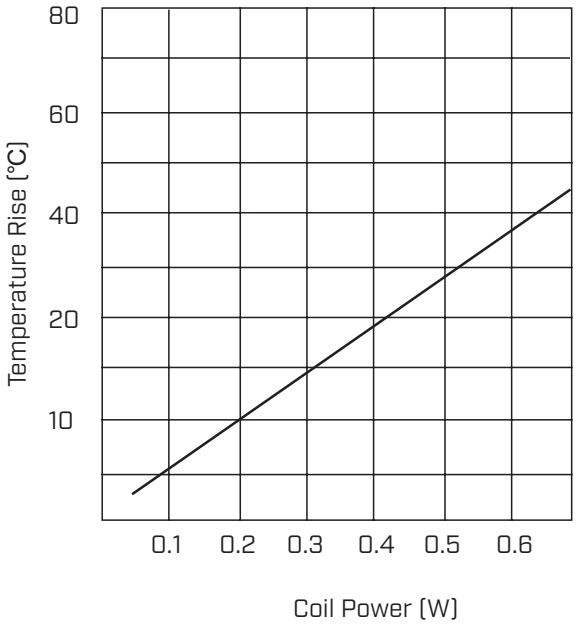
Wiring Diagram
Bottom View

CHARACTERISTIC CURVES

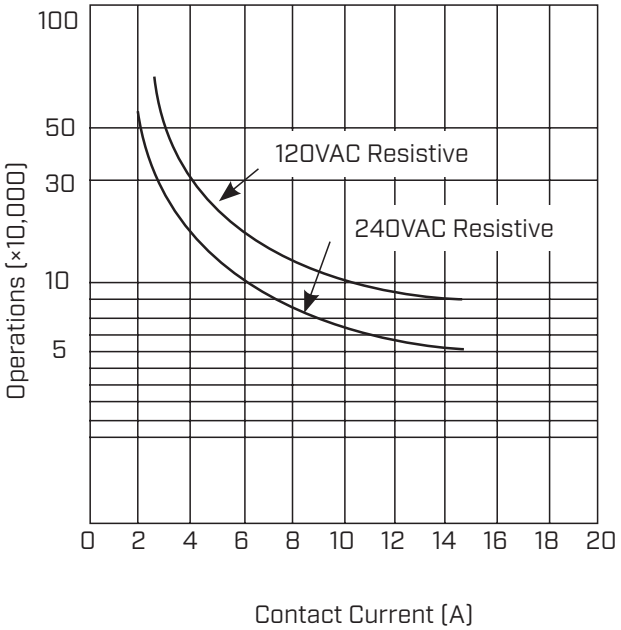
Time Curve



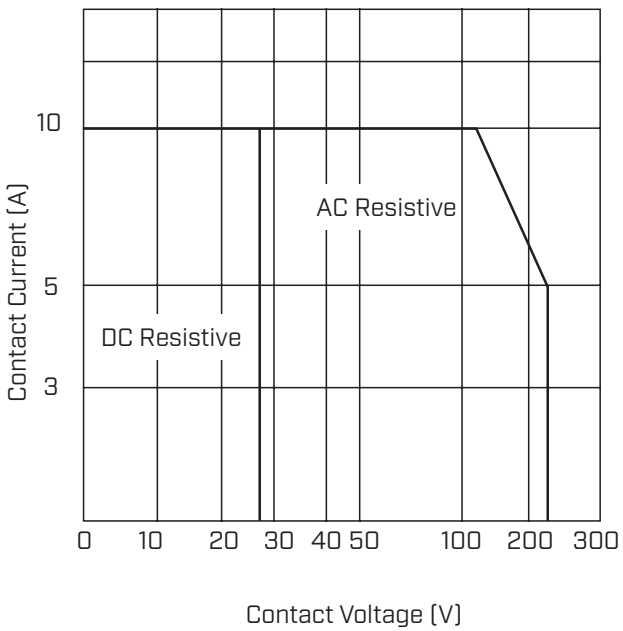
Coil Temperature Rise



Life Curve



Maximum Switching Power



REVISION HISTORY

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

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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