

date 08/15/2022

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SERIES: PR13 | DESCRIPTION: POWER RELAY

FEATURES

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





MODEL	coil voltage	coil resistance	operating voltage	release voltage	coil power
	typ (Vdc)	(Ω±10%)	min (Vdc)	max (Vdc)	max (mW)
PR13-5V-450-1A	5	55	3.5	0.5	450
PR13-12V-450-1A	12	320	8.4	1.2	450
PR13-24V-450-1A	24	1,280	16.8	2.4	450
PR13-5V-450-1C	5	55	3.5	0.5	450
PR13-12V-450-1C	12	320	8.4	1.2	450
PR13-24V-450-1C	24	1,280	16.8	2.4	450

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

PART NUMBER KEY

PR13 - XX - 450 - XX

Base Number

Coil Voltage (Vdc): 5V = 5

12V = 12 24V = 24 Contact Form: 1A = 1 Form A 1C = 1 Form C

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CONTACT SPECIFICATIONS

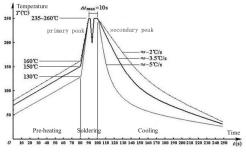
parameter	conditions/description	min	typ	max	units
contact form	1 Form A, 1 Form C				
contact material	Ag alloy				
contact rating	10 A @ 250 Vac 10 A @ 30 Vdc				
contact resistance	at 24 Vdc, 1.0 A			100	mΩ
max switching voltage				250 30	Vac Vdc
max switching current				10	А
max switching power				2,500 300	VA W
min switching load	5 Vdc, 100 mA				
life	electrical: NO Contact, 10 A @ 250 Vac mechanical		100,000 10,000,000		operations operations

GENERAL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units	
insulation resistance at 500 Vdc		1,000			ΜΩ	
dielectric strength between open contacts for 1 minute between coil and contacts for 1 minute			1,000 2,500		Vac Vac	
operate time				10	ms	
release time				5	ms	
shock resistance endurance misoperation			1,000 100		m/s² m/s²	
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	reight 11.0			g		
safety approvals UL/cUL 508						
flammability rating UL94V-0						
RoHS	yes					
packaging	tube: 25 pcs per tube carton size: 456 x 266 x 161 mm carton QTY: 1,000 pcs per carton					

SOLDERABILITY

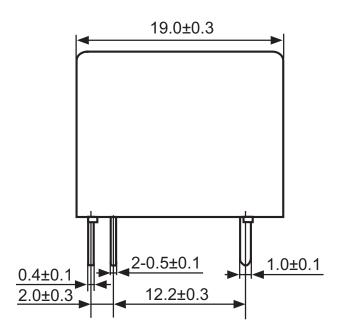
parameter	conditions/description	min	typ	max	units
hand soldering	for 3.5±0.5 seconds	340	350	360	°C
wave soldering	for 10±1 seconds	255	260	265	°C



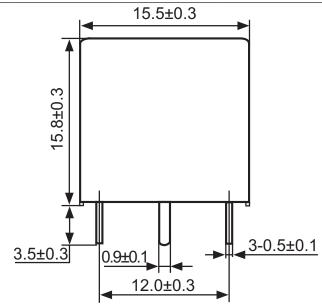
Double-wave Soldering Curve

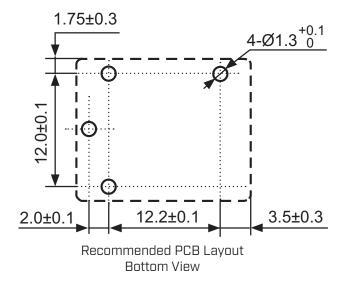
MECHANICAL DRAWING (1A = 1 FORM A)

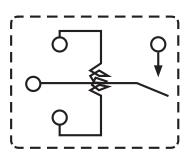
units: mm tolerance: ±0.3 mm unless otherwise noted



T	TEM	DESCRIPTION	MATERIAL	PLATING/COLOR
	Α	housing	PBT (UL94V-0)	black
	В	terminals	copper covered steel	tin



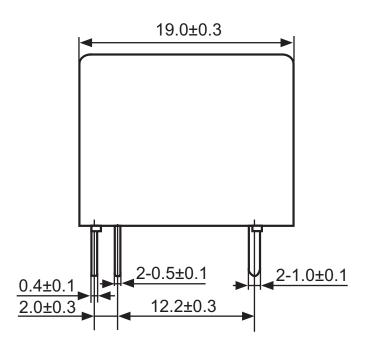




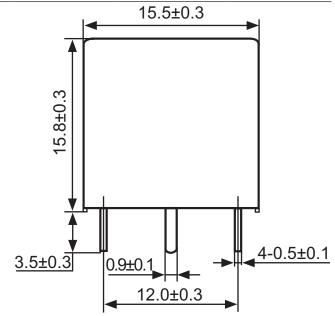
Wiring Diagram Bottom View

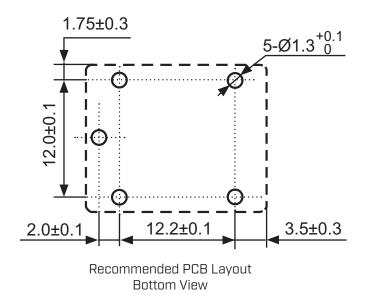
MECHANICAL DRAWING (1C = 1 FORM C)

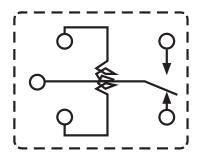
units: mm tolerance: ±0.3 mm unless otherwise noted



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







Wiring Diagram Bottom View

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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