



SERIES: PRY1 | **DESCRIPTION:** POWER RELAY

FEATURES

- Class F
- 5 A
- epoxy sealed

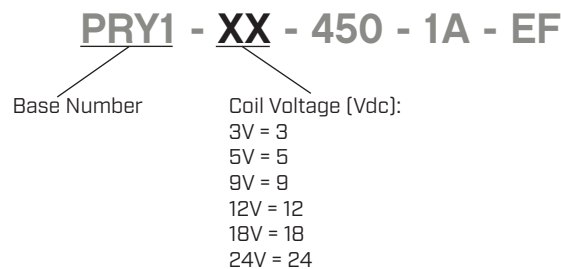


MODEL

	coil voltage	coil resistance	operating voltage	release voltage	coil power
	typ (Vdc)	($\Omega \pm 10\%$)	min (Vdc)	max (Vdc)	typ (mW)
PRY1-3V-450-1A-EF	3	20	2.25	0.15	450
PRY1-5V-450-1A-EF	5	56	3.75	0.25	450
PRY1-9V-450-1A-EF	9	180	6.75	0.45	450
PRY1-12V-450-1A-EF	12	320	9.0	0.6	450
PRY1-18V-450-1A-EF	18	720	13.5	0.9	450
PRY1-24V-450-1A-EF	24	1,280	18	1.2	450

Notes: 1. Maximum voltage is 130% of nominal voltage.
 2. Coil temperature rise 70 K max.
 3. 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				
contact material	Ag alloy				
contact rating	5 A @ 250 Vac				
contact resistance	at 6 Vdc, 1.0 A			100	mΩ
contact temperature rise				70	K
max switching voltage				250 30	Vac Vdc
max switching current				5	A
max switching power				1,250 150	VA W
min switching load	5 Vdc, 100 mA				
life	electrical: at 250 Vac/5 A, 1 second on, 9 seconds off mechanical: 0.1 seconds on, 0.1 seconds off	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		1,000 4,000		Vac Vac
coil insulation system	Class F				
operate time				10	ms
release time				5	ms
shock resistance	endurance: 3 shocks in each XYZ direction for 6 ms misoperation: 3 shocks in each XYZ direction for 11 ms		1,000 100		m/s ² m/s ²
vibration resistance	endurance: 10~55 Hz, 1.5 mm double amplitude for 2 hours misoperation: 10~55 Hz, 1.5 mm double amplitude for 5 minutes				
operating temperature		-40		105	°C
humidity		45		85	%RH
weight			5.5		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	carton size: 230 x 215 x 170 mm carton QTY: 1,000 pcs per carton				

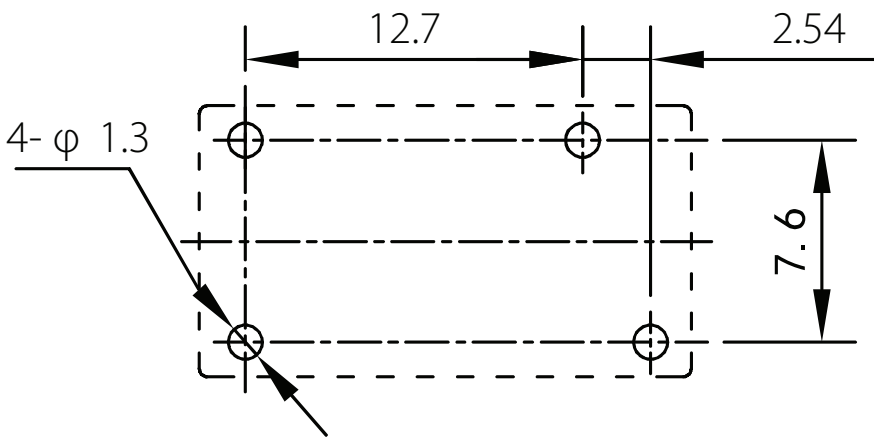
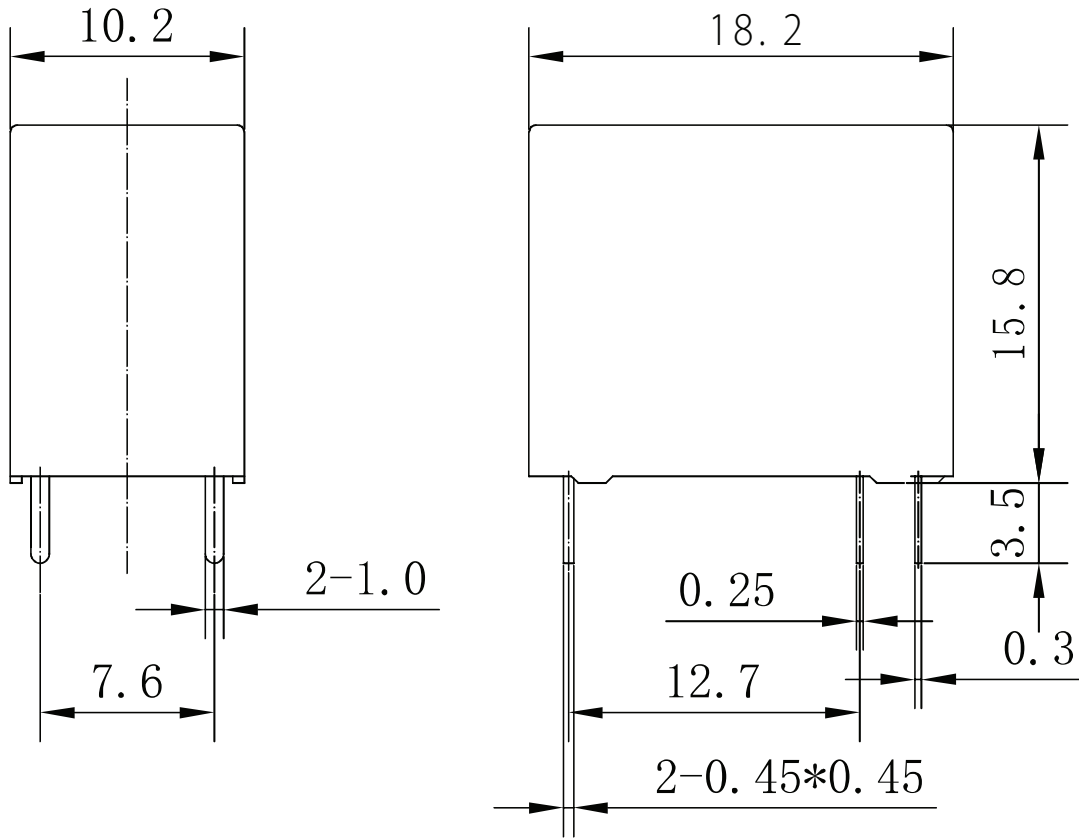
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
wave soldering	for 10±1 seconds	255	260	265	°C

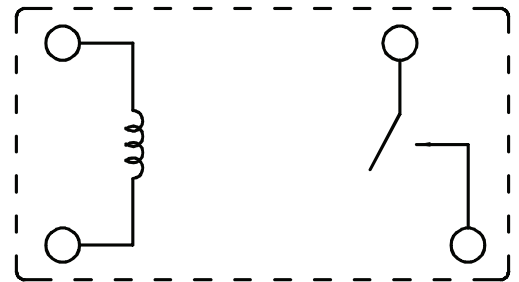
MECHANICAL DRAWING

units: mm
 tolerance:
 X≤1: ±0.20 mm
 1<X≤5: ±0.3 mm
 X>5 mm: ±0.4 mm
 PCB: ±0.10 mm
 unless otherwise noted

DESCRIPTION	MATERIAL	PLATING/COLOR
housing	PBT [UL94V-0]	black
terminals	copper alloy	tin
coil terminals	enameled wire	



Recommended PCB Layout
Bottom View



Wiring Diagram
Bottom View

REVISION HISTORY

rev.	description	date
1.0	initial release	07/03/2025

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



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