

SERIES: PRE29 | **DESCRIPTION:** POWER RELAY**FEATURES**

- 5 amp
- 1 form A
- class B & class F

**MODEL**

	coil voltage typ [Vdc]	coil resistance [Ω±10%]	operating voltage ¹ min [Vdc]	release voltage max [Vdc]	continuous voltage max [Vdc]	coil power max [mW]
PRE29-3V-S-450	3	20	2.1	0.15	3.9	450
PRE29-5V-S-450	5	55	3.5	0.25	6.5	450
PRE29-6V-S-450	6	80	4.2	0.30	7.8	450
PRE29-9V-S-450	9	180	6.3	0.45	11.7	450
PRE29-12V-S-450	12	320	8.4	0.60	15.6	450
PRE29-18V-S-450	18	720	12.6	0.90	23.4	450
PRE29-24V-S-450	24	1,280	16.8	1.20	31.2	450
PRE29-48V-S-450	48	5,120 ²	33.6	2.4	62.4	450

Notes: 1. Relay may pull in with less than operating voltage.
2. Coil resistance tolerance is ±15%.
3. All specifications are measured at 20°C unless otherwise specified.

PART NUMBER KEY**PRE29 - XX - S - 450 - 1A - X X**

Base Number

Coil Voltage [Vdc]:

3V = 3
5V = 5
6V = 6
9V = 9
12V = 12
18V = 18
24V = 24
48V = 48

Sealing:

"blank" = Flux Protection
E = Epoxy Sealed

Coil Insulation:

"blank" = Class B
F = Class F

COIL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
coil power	nominal		450		mW
	at pickup voltage		200		mW
coil power continuous dissipation	at 20°C			760	mW
temperature rise	at nominal coil voltage		41		K

CONTACT SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
contact form	1 Form A				
contact material	AgSnO ₂ (silver tin oxide)				
contact rating	5 A @ 250 Vac				
	5 A @ 30 Vdc				
	1/6 HP @ 125 Vac				
contact resistance				100	mΩ
max switching voltage				250	Vac
				30	Vdc
max switching current				5	A
max switching power	Vac			1,250	VA
	Vdc			150	W
life	electrical	100,000			operations
	mechanical	10,000,000			operations

GENERAL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
insulation resistance	at 500 Vdc, 20 °C, 50% RH	1,000			MΩ
dielectric strength	between open contacts at sea level for 1 minute		1,000		Vrms
	between coil and contacts at sea level for 1 minute		4,000		Vrms
operate time	at nominal coil voltage			8	ms
release time	at nominal coil voltage, without coil suppression			4	ms
operating temperature	Class B models at nominal coil voltage	-40		85	°C
	Class F models at nominal coil voltage	-40		105	°C
storage temperature		-40		105	°C
weight			6		g
safety approvals	UL/cUL 508				
flammability rating	UL94V-0				
RoHS	yes				
packaging	tray: 100 pcs per tray carton QTY: 1,000 pcs per carton				

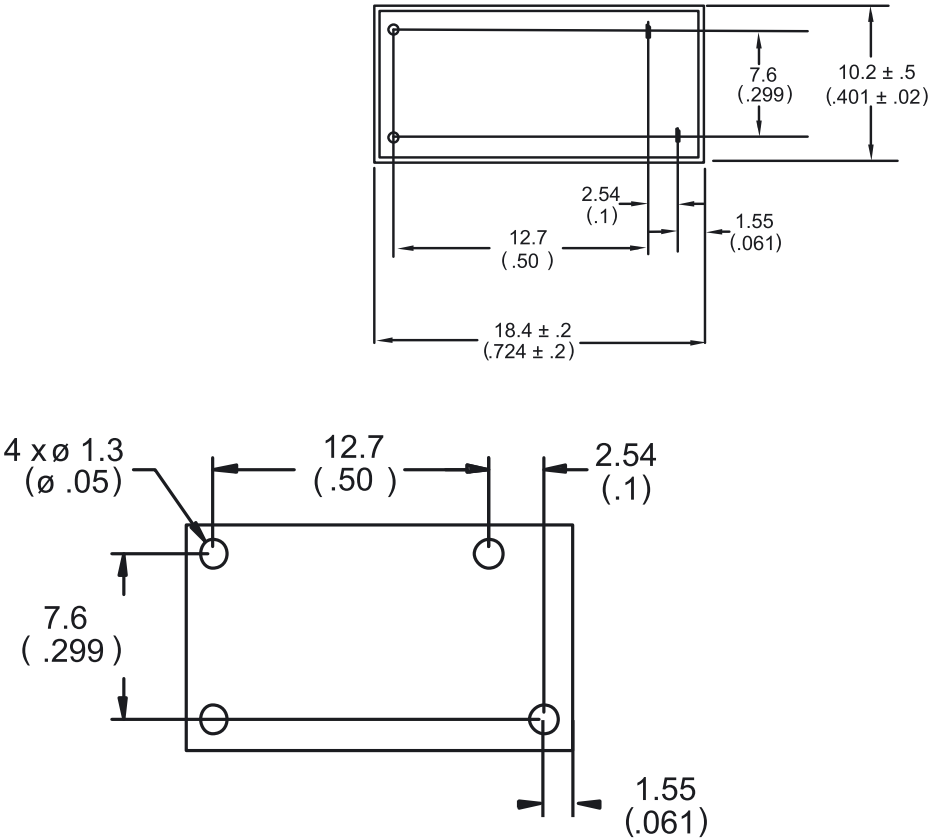
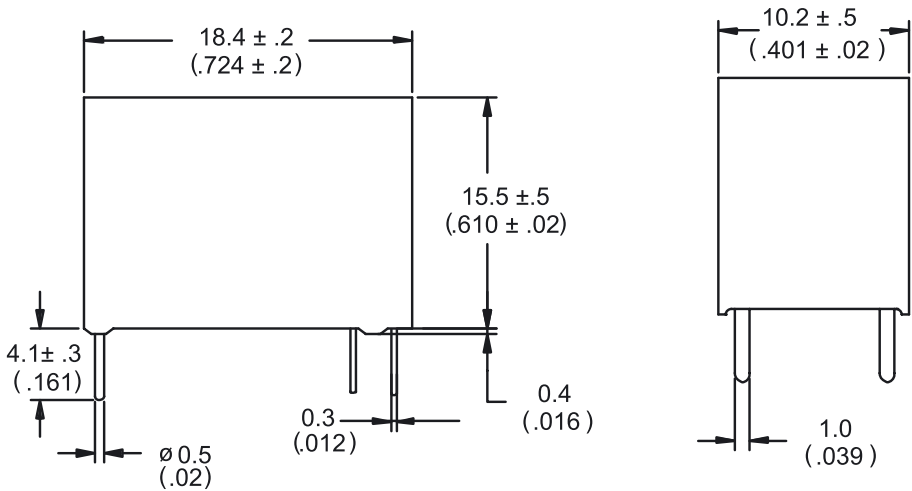
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
wave soldering	for max 5 seconds			270	°C
washable	only on epoxy sealed models max immersion time of 30 seconds			80	°C

MECHANICAL DRAWING

units: mm [inch]
tolerance: ±0.254 mm
unless otherwise noted

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



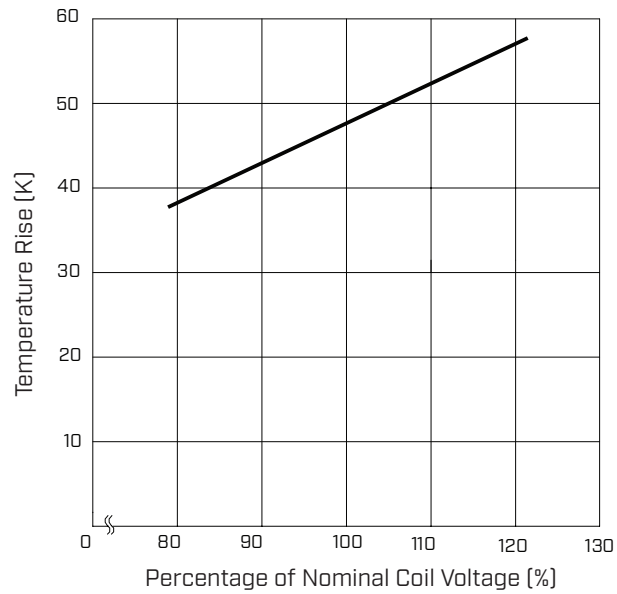
Recommended PCB Layout
Bottom View



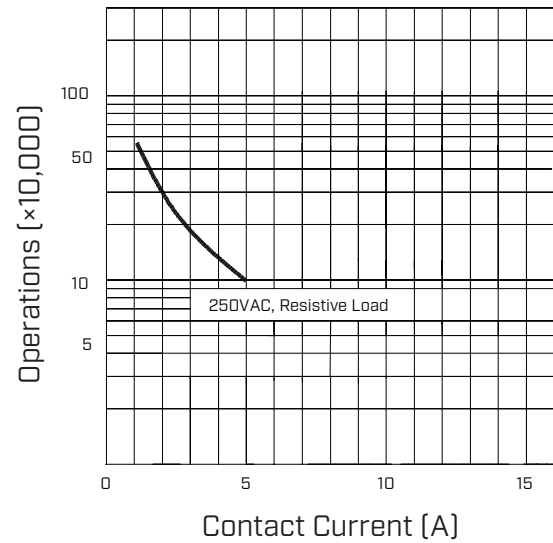
Wiring Diagram
Bottom View

CHARACTERISTIC CURVES

Coil Temperature Rise



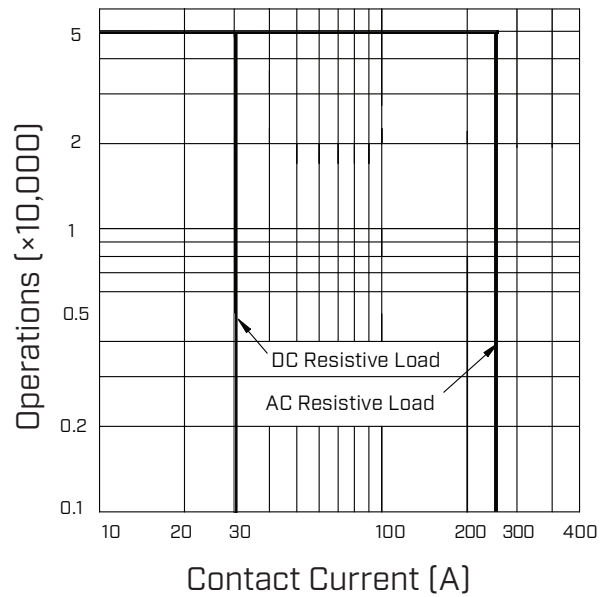
Life Curve



Test Conditions:

Flux protection, room temp, 1.5 seconds on 1.5 seconds off

Maximum Switching Power



REVISION HISTORY

rev.	description	date
1.0	initial release	02/14/2024

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



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