



**SERIES:** PR29 | **DESCRIPTION:** POWER RELAY

**FEATURES**

- 10 amp
- 1 Form A
- class B & class F



**MODEL**

	coil voltage typ (Vdc)	coil resistance  ( $\Omega \pm 10\%$ )	operating voltage <sup>1</sup> min (Vdc)	release voltage max (Vdc)	continuous voltage max (Vdc)	coil power max (mW)
PR29-3V-S-450	3	20	2.1	0.15	3.9	450
PR29-5V-S-450	5	55	3.5	0.25	6.5	450
PR29-6V-S-450	6	80	4.2	0.30	7.8	450
PR29-9V-S-450	9	180	6.8	0.45	11.7	450
PR29-12V-S-450	12	320	8.4	0.60	15.6	450
PR29-18V-S-450	18	720	12.6	0.90	23.4	450
PR29-24V-S-450	24	1,280	16.8	1.20	31.2	450

Notes: 1. Relay may pull in with less than operating voltage.  
2. All specifications are measured at 20°C unless otherwise specified.

**PART NUMBER KEY**

**PR29 - 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

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 <sub>2</sub> (silver tin oxide)				
contact rating	10 A @ 250 Vac				
	10 A @ 30 Vdc				
	1/6 HP @ 125 Vac				
contact resistance				100	mΩ
max switching voltage				250	Vac
				30	Vdc
max switching current				10	A
max switching power	Vac			2,500	VA
	Vdc			300	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				

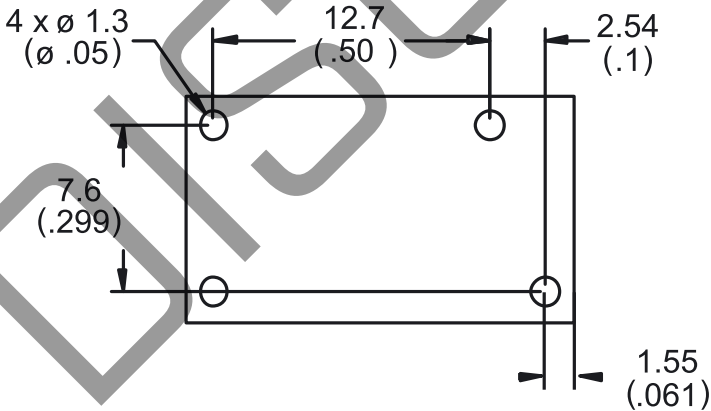
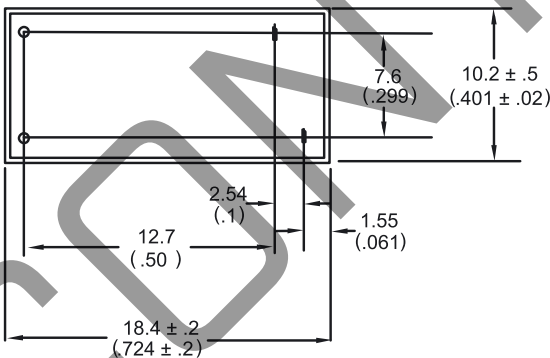
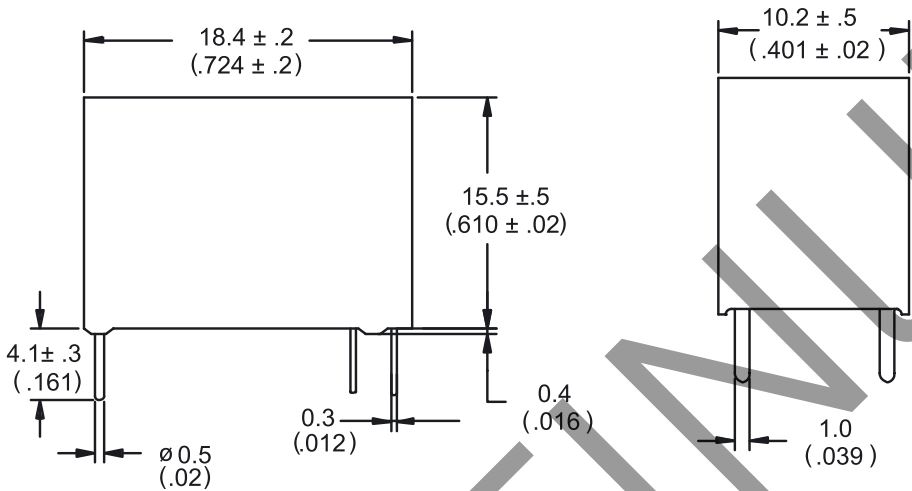
SOLDERABILITY

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:  $\pm 0.254$  mm  
unless otherwise noted

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



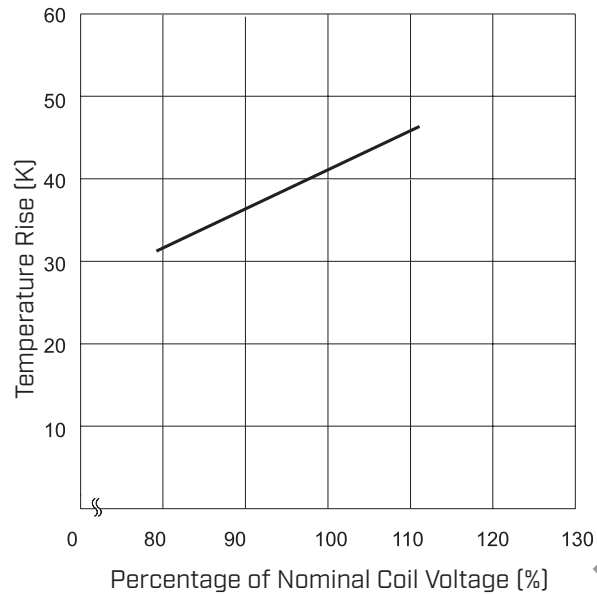
Recommended PCB Layout  
Bottom View



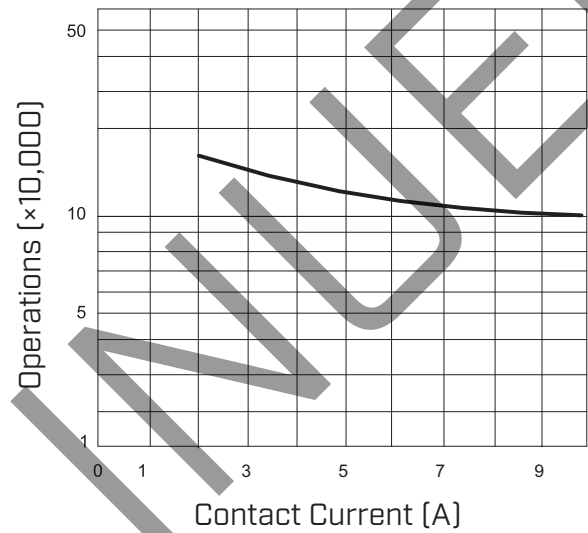
Wiring Diagram  
Bottom View

## CHARACTERISTIC CURVES

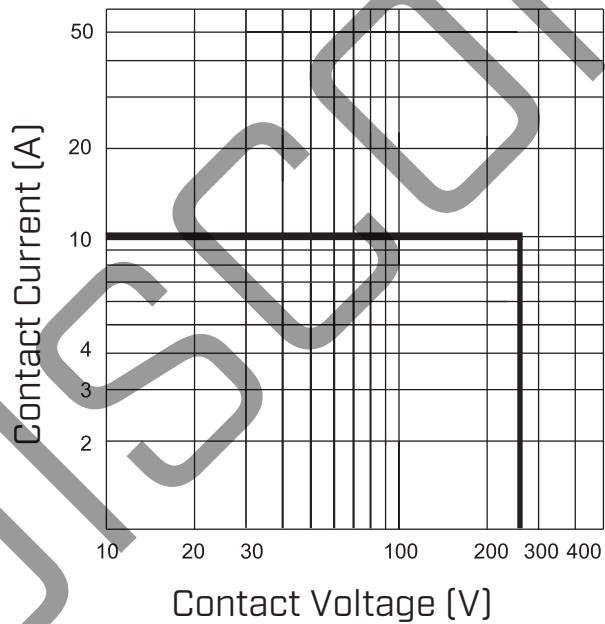
### Coil Temperature Rise



### Life Curve



### Maximum Switching Power



REVISION HISTORY

rev.	description	date
1.0	initial release	02/14/2024
1.01	CUI Devices rebranded to Same Sky	09/12/2024

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



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

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