



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 ¹ 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 ₂ (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				

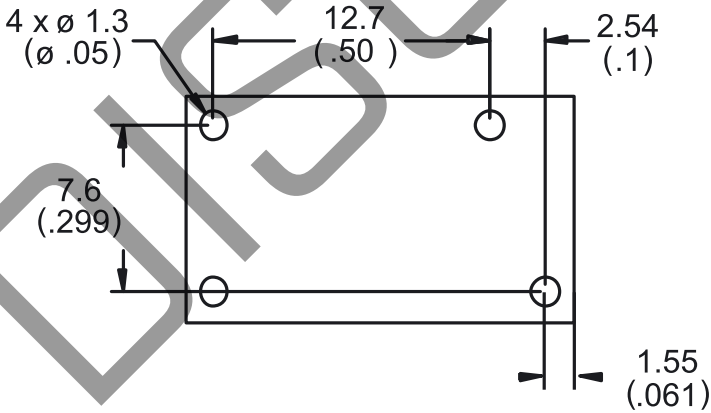
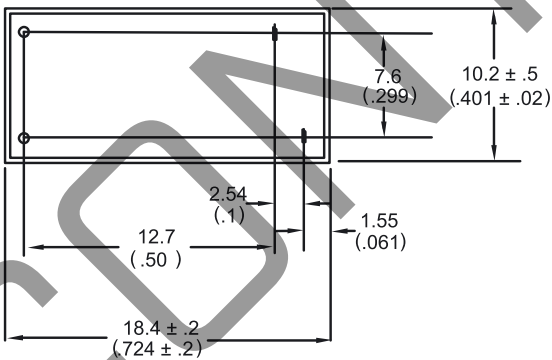
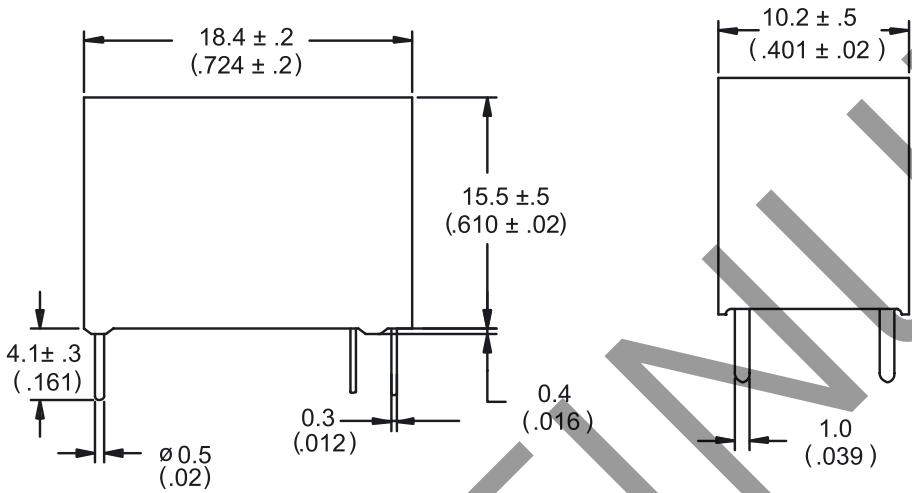
SOLDERABILITY

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: ± 0.254 mm
unless otherwise noted

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



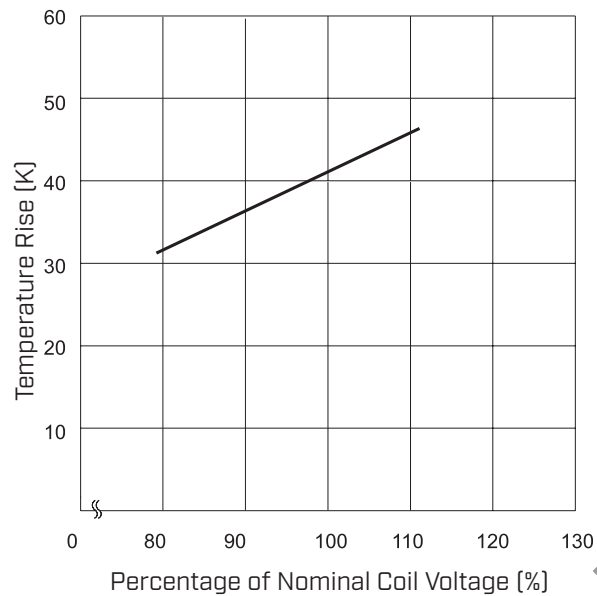
Recommended PCB Layout
Bottom View



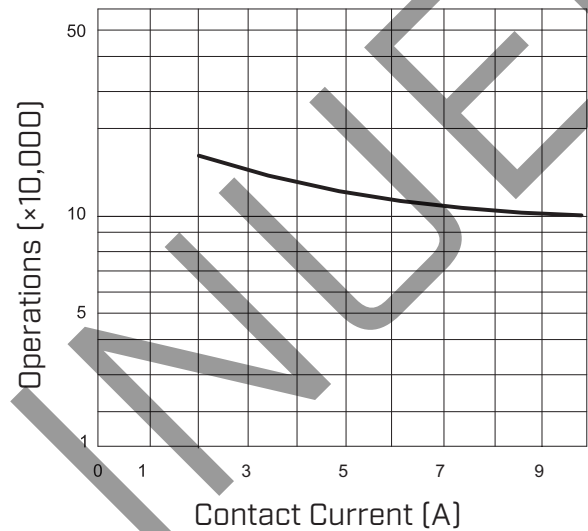
Wiring Diagram
Bottom View

CHARACTERISTIC CURVES

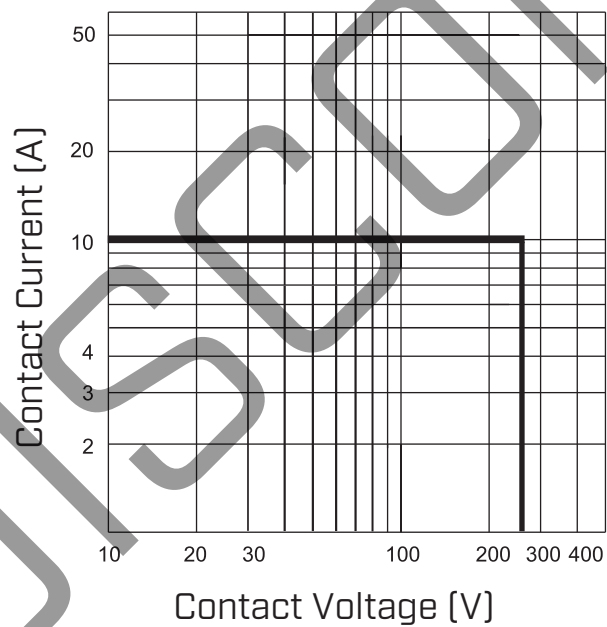
Coil Temperature Rise



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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