CUI Devices is now Same Sky! Learn More

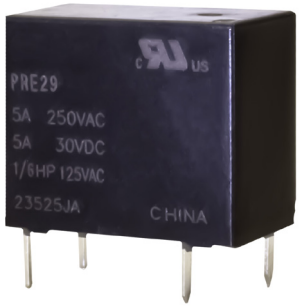
same sky

Additional Resources: Product Page

SERIES: PRE29 | DESCRIPTION: POWER RELAY

FEATURES

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



RoHS c UL us

MODEL

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

- PRE29 — Base Number
- XX — Coil Voltage (Vdc):
  - 3V = 3
  - 5V = 5
  - 6V = 6
  - 9V = 9
  - 12V = 12
  - 18V = 18
  - 24V = 24
  - 48V = 48
- X — Sealing:
  - "blank" = Flux Protection
  - E = Epoxy Sealed
- X — Coil Insulation:
  - "blank" = Class B
  - F = Class F

COIL SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
coil power	nominal at pickup voltage		450 200		mW mW
coil power continous 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 30	Vac Vdc
max switching current				5	A
max switching power	Vac Vdc			1,250 150	VA W
life	electrical mechanical	100,000 10,000,000			operations 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 between coil and contacts at sea level for 1 minute		1,000 4,000		Vrms 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 Class F models at nominal coil voltage	-40 -40		85 105	°C °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				

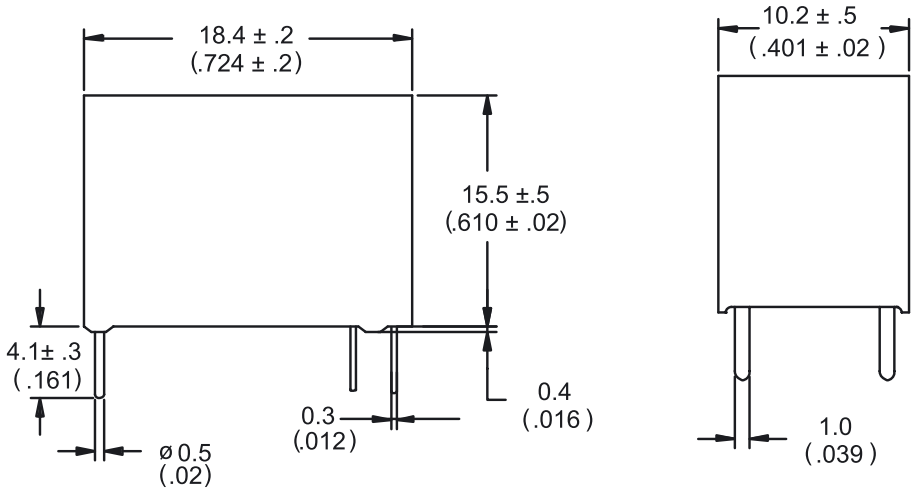
SOLDERABILITY

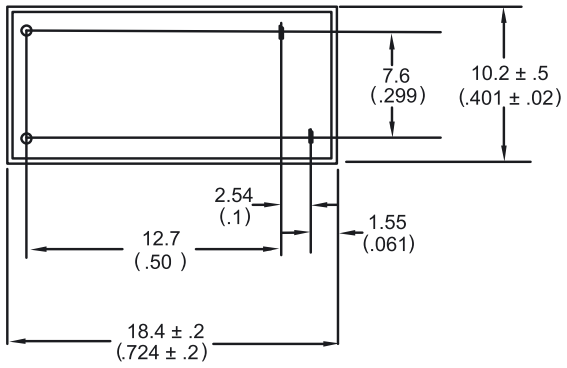
parameter	conditions/description	min	typ	max	units
wave soldering	for max 5 seconds			270	°C
washable	only on epoxy sealed models max imersion time of 30 seconds			80	°C

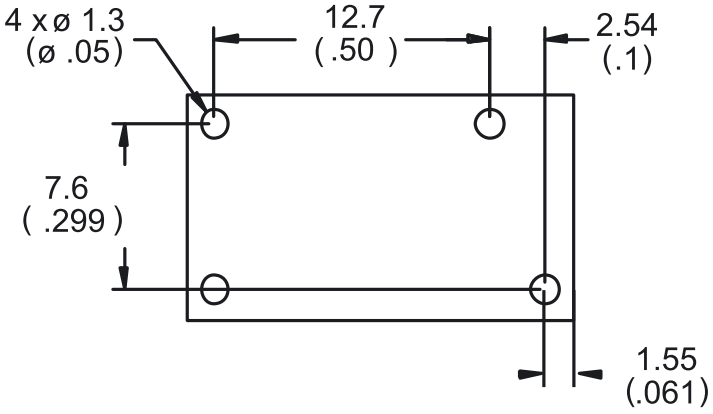
MECHANICAL DRAWING

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

DESCRIPTION	MATERIAL	PLATING/COLOR
housing	PBT (UL94V-0)	black
terminals	copper alloy	tin







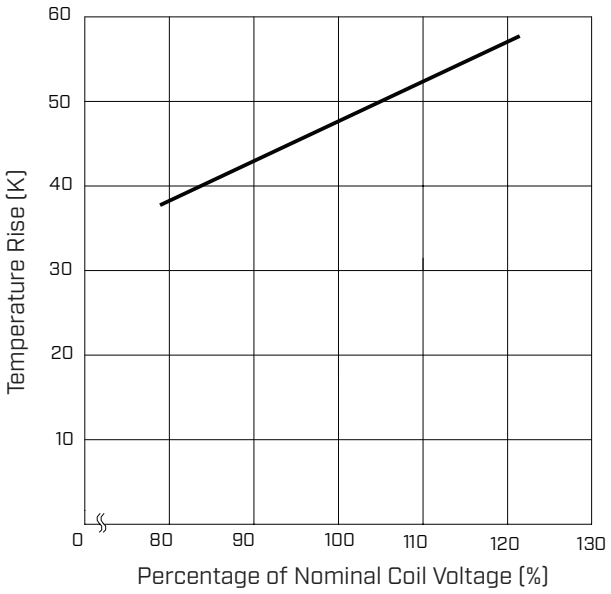
Recommended PCB Layout
Bottom View



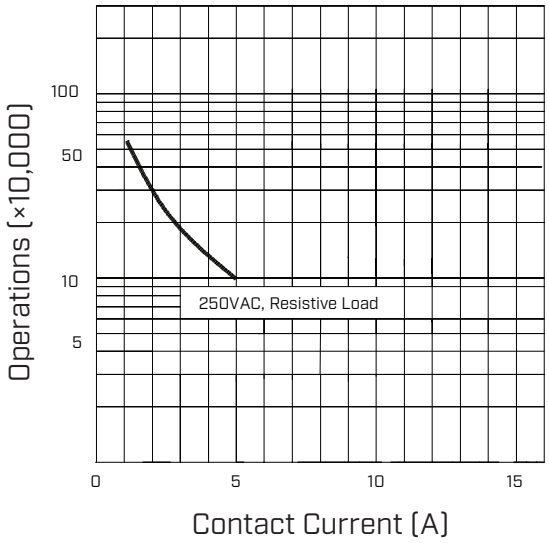
Wiring Diagram
Bottom View

CHARACTERISTIC CURVES

Coil Temperature Rise

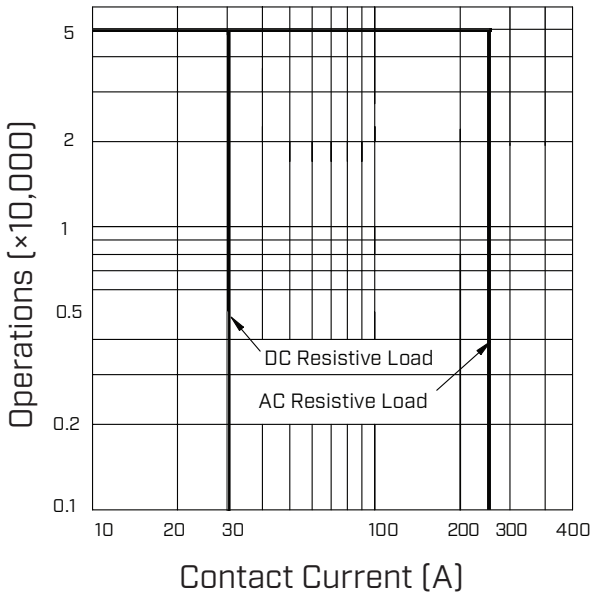


Life Curve



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
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.

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

Unikeyic Electronics

Global Electronic Components Distributor

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Same Sky:

CFM-6015V-239-292-20 CFM-A238BF-270-651 CMC-5042PF-AC TBP01R1-508-14BE CMP-5247TF-K
DS04-254-2-02BK-SMT PJ-067B SJ1-3535N TBP02P1-381-10BE CDM1222-12A-FW-F16-050-67
CFM-2510B-0130-275 CMI-9653S-SMT-TR CPM-2H HSE-B20350-NP PJ-058AH PR4-5V-450-1A
TB007-508-02BE CFM-2507CF-0140-313 CMA-4544PF-W CMM-2718AT-42316-TR DS01C-254-S-03BE
PJ-047BH PJ-202AH UJ32-C-H-G-L1-MSMT-TR CBT-09427-SMT-TR CPI-1375IC-80T
TBL004V-508-02BE-2GY CPT-1117-83-SMT-TR SJ-2523-SMT-TR SJ-43516-SMT-TR-PI