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Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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KRPS SERIES





Wiring Diagram



V = Voltage C = Common, Transfer Contact NC = Normally Closed NO = Normally Open S1 = Initiate Switch UTL = Untimed Load

A knob is supplied for adjustable units, or RT terminals 4 & 5 for external adjust. See external adjustment vs. time delay chart. The untimed load is optional. S1 is not used for some functions.

Description

The KRPS Series is a factory programmed time delay relay available with 1 of 15 functions and measures only 2 inches square. The KRPS offers a wide range of fixed, onboard, or externally adjustable time delays. The output relay contacts offer a full 10A rating with complete isolation. Its microcontroller timing circuit provides excellent repeat accuracy and stability. Encapsulation protects against shock, vibration, and humidity. The KRPS Series is a cost effective approach for OEM applications that require small size, isolation, accuracy, and long life. Special time ranges and functions are available.

Features & Benefits

FEATURES	BENEFITS		
Microcontroller based	Repeat Accuracy + / - 0.5%		
Compact design	Allows flexiblility for OEM applications		
Isolated, SPDT, 10A output	Allows control of loads for AC or DC voltages		
Encapsulated	Encapsulated to protect against shock, vibration, and humidity		

Accessories



P1004-95, P1004-95-X Versa-Pot Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P0700-7 Versa-Knob Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.

P1015-64 (AWG 14/16) **Female Quick Connect** These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



P1015-18 Quick Connect to Screw Adapter Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.



C103PM (AL) DIN Rail 35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



P1023-20 DIN Rail Adapter Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.

Ordering Information

MODEL	INPUT VOLTAGE	ADJUST.	TIME DELAY	FUNCTION
KRPS4160MM	120VAC	Fixed	60m	Delay-on-Make
KRPS913MB	230VAC	Fixed	3m	Delay-on-Break
KRPSA10.1SFT	24 - 240VAC/DC	Fixed	0.1s	Alternating
KRPSA21RE	24 - 240VAC/DC	Onboard	0.1 - 10s	Recycling, On Time First
KRPSA22B	24 - 240VAC/DC	Onboard	1 - 100s	Delay-on-Break
KRPSA24M	24 - 240VAC/DC	Onboard	0.1 - 10m	Delay-on-Make
KRPSD10.1SF	12 to 48VDC	Fixed	0.1s	Leading Edge Flip-Flop
KRPSD21B	12 to 48VDC	Onboard	0.1 - 10s	Delay-on-Break
KRPSD21M	12 to 48VDC	Onboard	0.1 - 10s	Delay-on-Make
KRPSD22M	12 to 48VDC	Onboard	1 - 100s	Delay-on-Make
KRPSD22S	12 to 48VDC	Onboard	1 - 100s	Single Shot
KRPSD25S	12 to 48VDC	Onboard	1 - 100m	Single Shot

If you don't find the part you need, call us for a custom product 800-843-8848



KRPS SERIES

Specifications

Time Delay Туре Range Repeat Accuracy Tolerance (Factory Calibration) Reset Time **Initiate Time** Time Delay vs Temp. & Voltage Input Voltage Tolerance 12 to 48VDC 24 to 240VAC/DC AC Line Frequency/DC Ripple **Power Consumption** Output Type Form Rating (at 40°C)

Microcontroller circuitry 0.1s - 1000h in 9 adjustable ranges or fixed $\pm 0.5\%$ or 20ms, whichever is greater

≤ ±2% ≤ 150ms ≤ 40ms; ≤ 750 operations per minute

 $\leq \pm 2\%$

12 to 48VDC; 24 to 240VAC/DC

-15% - 20% -20% - 10% 50/60Hz / ≤ 10% AC ≤ 2VA; DC ≤ 2W

Isolated relay contacts SPDT 10A resistive @ 125VAC 5A resistive @ 230VAC & 28VDC 1/4 hp @ 125VAC 250VAC Mechanical - 1 x 10⁷; Electrical - 1 x 10⁵

Protection

Circuitry Isolation Voltage Insulation Resistance Polarity Mechanical Mounting Dimensions

Termination Environmental

Operating/Storage Temperature Humidity Weight

Encapsulated \geq 1500V RMS input to output \geq 100 M Ω DC units are reverse polarity protected

Surface mt. with one #10 (M5 x 0.8) screw H 50.8 mm (2.0"); W 50.8 mm (2.0"); D 30.7 mm (1.21") 0.25 in. (6.35 mm) male quick connects

 -40° to 60° C / -40° to 85° C 95% relative, non-condensing ≈ 2.6 oz (74 g)

Output Current/Ambient Temperature



Max. Switching Voltage

Life (Operations)

Timer Functions

Operation (Delay-on-Make)

Upon application of the input voltage, the dime delay begins. The output relay is de-energized before and during the time delay. At the end of the time delay, the put energizes and remains energized until input voltage is removed.

Reset: Removing input voltage resets the time delay and output.

Operation (Delay-on-Break)

Input voltage must be applied before and during timing. Upon closure of the initiate switch, the output relay energizes. The time delay begins when the initiate switch is opened. The output remains energized during timing. At the end of the time delay, the output de-energizes. The output will energize if the initiate switch is closed when input voltage is applied.

Reset: Re-closing the initiate switch during timing resets the time delay. Removing input voltage resets the time delay and output.

Operation (Recycling)

Upon application of input voltage, the output relay energizes and the ON time begins. At the end of the ON time, the output deenergizes and the OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied.

Reset: Removing input voltage resets the output and time delays, and returns the sequence to the first delay.







