

MINI-KAL

Features

- UL, CSA Listed, CE Certified
- 6 and 8 Digit models
- PC Board Mountable
- Low Power Consumption
- 10 kHz Count Speed
- Easily Integrated Into OEM Systems
- Add -Subtract (AS Version)

MINI-KAL1

MINI-KAL1AS

Description:

The MINI-KAL series of small, easy-to-mount LCD counters can be mounted directly to a PC board, or, with SLIM-KAL, through two screw holes in a panel. They are useful for counting applications where space is tight, and where OEM instrument makers want a pre-designed counter.

The MINI-KAL is a PC board mountable, 6 digit counter which counts up to 10 kHz, and consumes less than 15 μ A of current. Connections are via four pins on 0.1 inch centers.

The MINI-KAL-DAS is a small 6-digit electronic add/subtract totalizing counter, based on the latest CMOS technology and incorporates a 6-digit 6mm character height, high contrast LCD display.

The MINI-KAL-DAS has been specifically designed to use minimal power—quiescent current less than 5 microamps making the unit ideally suited in low power battery applications. The counter will add and subtract count pulses at input frequencies up to 10 kHz making the unit suitable for use in position, length and distance measuring applications.

MINI-KAL 1

Specifications:

Voltage: 3 VDC (\pm 0.6V)

Current: 15 μ A

Display: 6 digit, LCD, 0.2" high

Temperature Range:

Operating: +14 to 122°F (-10 to 50°C)

Storage: -14 to 140°F (-20 to 60°C)

Signal Inputs:

COUNT INPUT: Electronic 10 kHz max. (min. on/off 50 μ sec)
Negative edge triggered, 0.7 V threshold. Max. input 24 VDC

RESET: Electronic Negative edge triggered 0.7 V threshold. (min. on/off pulse 20 mS)

Material: Clear polycarbonate

Weight: 0.25 oz.

Miniature, Low Cost Electronic Counter



MINI-KAL1AS

Specifications:

Voltage: 3VDC \pm 0.4V (VDD)

Current: 5 μ A typical

10 μ A maximum at 10 kHz

Display: 6 digit 0.2" character height black LCD

Temperature Range:

Same as MINI-KAL1

Signal Inputs:

COUNT INPUT: Electronic 10 kHz max. (min. on/off 50 μ sec) Negative edge triggered, 0.7V threshold, TTL/CMOS compatible.

DIRECTION: Electronic input, TTL/CMOS compatible.

Add—logic 1 (VDD)

Subtract -logic 0 (0 to 0.7 V)

RESET: Negative edge triggered 0.7V threshold, minimum pulse length 50 μ S.

Material: Clear PETP

Weight: 3 oz. (75 grams)

Sealing: IP40/DIN40050

Dimensions: 27x175x65 mm

MINI-KAL2AS

Description:

The MINI-KAL2 AS add/subtract totalizing counters operate from an external 3VDC supply and feature an 8 digit high contrast LCD display with a character height of .315". The unit is suitable for PCB mounting and is available with or without the front panel reset button. Inputs are provided for count direction and external reset. The counter will add and subtract count pulses at input frequencies up to 10 kHz making it suitable for use in position length and distance measuring applications. With power consumption less than 10 μ A, typically 5 μ A, this unit is ideally suited in portable battery powered applications.

MINI-KAL2AS

Specifications:

Voltage: 3VDC ± 0.4V (VDD)

Current: 5µA typical, 10µA max. at 10 kHz

Display: 8 digit 8mm character height black LCD

Temperature Range:

Operating: +14 to 122°F (-10 to 50°C)

Storage: -14 to 140°F (-20 to 60°C)

Signal Inputs:

COUNT INPUT: Electronic input 10KHz max., negative edge triggered, 0.7V threshold, minimum pulse length 50 µS, TTL/CMOS compatible.

COUNT INPUT: Contact closure/open collector input, 30 Hz max, negative edge triggered, 0.7V threshold, minimum pulse length 15 mS.

DIRECTION: TTL/CMOS compatible.

Add—logic 1 (VDD)

Subtract—logic 0 (0 to 0.7 V)

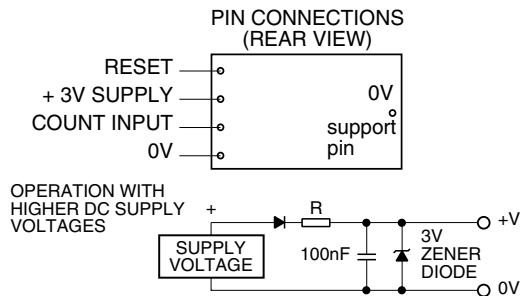
EXTERNAL RESET: Contact closure/open collector input, negative edge triggered, 0.7V threshold, minimum pulse length 15 mS.

Connections: 6 PCB mounting pins on a 0.1 inch pitch.

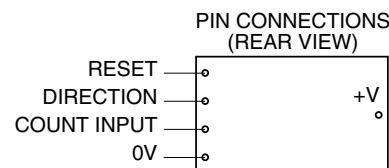
Approvals: UL File: E135458, CSA File: LR96702, CE Approved

Wiring:

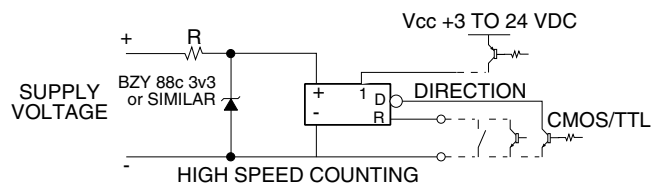
MINI-KAL1 Hookup



MINI-KAL-DASH Hookup

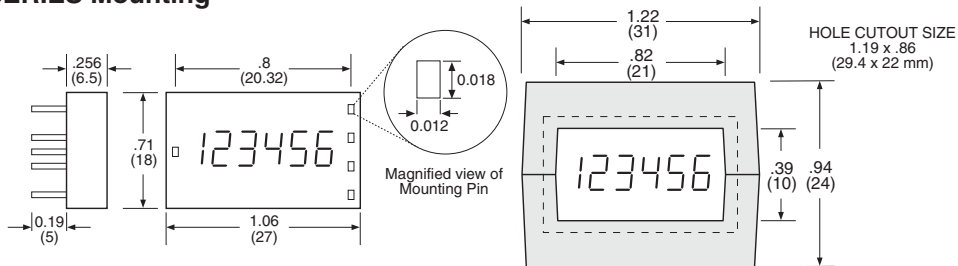


MINI-KAL2AS Hookup



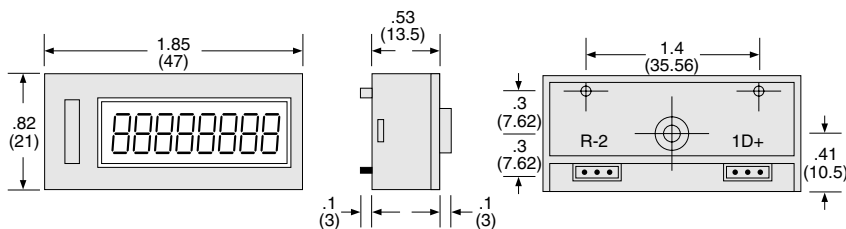
Mounting:

MINI-KAL1 SERIES Mounting



MINI-KAL1 SERIES with KALPM1 panel adaptor clips into panel .050 to .125 thick

MINI-KAL2AS Mounting



How To Order:

- MINI-KAL1 6 digit adding counter
- MINI-KAL1AS 6 digit add/subtract counter
- KALPM1 MINI-KAL panel mount adaptor
- MINI-KAL2AS 8 digit add/subtract counter
- MINI-KAL2ASNR Non-reset MINIKAL2AS (non-reset)

* For no reset, add "NR" to part number