DESCRIPTION:

The MK 50282 is a five-function (+, –, X, ÷, %), -8-digit calculator with an average value function, an item counter function and automatic constant. Additional features are floating negative sign, algebraic entry, floating decimal point, chain calculations, credit balance, leading zero suppression, display blanking during calculations, and internal clock oscillator. A floating negative sign eliminates the need for a ninth digit.

OUTPUTS

The digit outputs, D_1–D_{11}, are selected (conduct to V_{SS}) sequentially. Note that there is inter-digit blanking. The digit lines are also fed back to the chip (min. level =) as keyboard inputs.

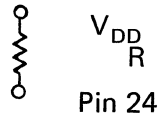
The segment outputs (SA–SG, Sdp) select the appropriate seven-segment code (with decimal point) for each digit as that digit is selected. ** A segment output conducts to V_{SS} when selected. When not selected, a segment output is in an open-drain state. The resultant display font is shown.* Segment output current is controlled by the I_{set} input (see direct drive).

*leading zeros are blanked
**The floating negative sign is always selected during the digit position to the immediate left of the most significant digit

DIRECT DRIVE

The regulated segment outputs of the MK 50282 are capable of sourcing up to mA for the purpose of driving the segments of common cathode LED displays. I_{set} (pin 24) regulates the segment output current. Placing a resistor between pin 24 and V_{DD} determines the peak segment current in the following manner

$$\text{Peak current} = 10 \times \frac{V_{DD}}{R}$$



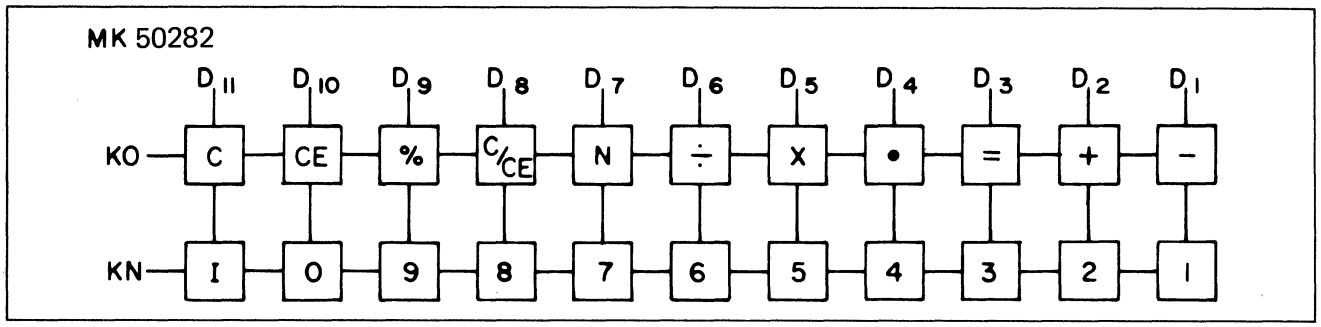
OVERFLOW

Attempting an entry of more than 8 digits exceeds the capacity of the MK 50282 and results in an entry overflow condition. This causes the display to blink repetitively as an overflow indication. All keys except C/CE will be inoperative. These, however, may be used to clear the overflow condition in the course of their usual function.

A calculated result in excess of 8 digits exceeds the capacity of the MK 50282 and produces a result overflow condition. This causes the display to blink repetitively as an overflow indication. The display will contain the correct answer (÷ by 10^8 to 8 significant decimal places). All keys except C/CE will be inoperative. This may be used to clear the overflow condition in the course of its usual function.

Consumer

KEY MATRIX



% - Computes and displays a percentage of a number which may be added to (tax) or subtracted from (discount) the original value.

N - Recalls the number of entries in a list. This may be divided into the total to compute the average value.

I - Permits the calculator to be used as a counter. Each depression of the key increments the display by one.