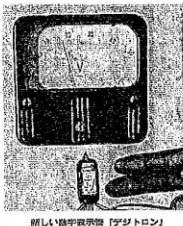


約25ボルトで文字表示

伊勢電機「デジトロン」を開発



新しい「数字表示管」デジトロン

伊勢電機工業株式会社は、IC(集積回路)方式の電子卓上計算機に採用されるデジタル表示管として、従来の真空管表示管に比べて、約25ボルトの低電圧で文字表示が可能となる「デジトロン」を開発した。これは、従来の真空管表示管に比べて、約1/10の消費電力で、約100ルクスの輝度で文字表示が可能である。また、従来の真空管表示管に比べて、約1/10の消費電力で、約100ルクスの輝度で文字表示が可能である。また、従来の真空管表示管に比べて、約1/10の消費電力で、約100ルクスの輝度で文字表示が可能である。

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"Character display at about 25 volts" "Ise Electronics develops "Digitron"

Ise Electronics (700 Wada, Ueno-cho, Ise City, Mie Prefecture, President: Tadashi Nakamura) has developed a new numeric display tube, "Digitron" for use in IC-based electronic calculators, with the cooperation of Hayakawa Electric and Nippon Electronic Materials. This is the first in the world to be able to display characters at a low voltage of about 25 volts. The company is planning to start mass production this fall, and it is expected to have a major impact on related industries when it is released.

"Digitron" has the following features: 1) a brightness of over 100 lux at a low voltage of 20 to 25 volts, 2) characters painted with green phosphor are displayed on on the same plane at the same depth, and 3) low power consumption. The low voltage is particularly noteworthy as it can be used immediately with IC-based desktop calculators.

Technically, the principle is that electrons emitted from a directly heated filament are accelerated by a grid and blink in response to the phosphor painted on the character display board and the input signal. The new feature is that the filament is now in front of the dial, which is a 180 degree turn from the previous version where it was at the rear, and the key point is that the filament is not visible even when the letters are displayed.

There are two ways to display the results of calculations on electronic desktop calculators: the light dot type and the vacuum tube type. The light dot type was developed by Canon, while other manufacturers use neon numeral display tubes patented by Burroughs in the United States. Digitron is a vacuum tube type like the neon numeral display tube, but it is said to have eliminated the drawbacks that have been cited up until now. It was successfully developed with the cooperation of Hayakawa Electric in the circuit area and Nippon Electronic Materials in the materials area, in order to be used in IC-based desktop calculators, which are expected to grow in the future.

It is currently in the prototype stage, but there are plans to expand the factory to the headquarters factory in Ise City on a site of about 13,000 square meters this fall to mass-produce it, with a monthly production of 100,000 units planned from April next year.