## Thermistor

Changes in Production of NTC and PTC

|       | Figured with the state | Edition of the S |              | Unit:         | 10,000 pcs |
|-------|------------------------|------------------|--------------|---------------|------------|
| Item  | year                   | 1982             | 1983         | 1984          | 1985       |
| NTC   | Q'ty<br>Growth rate    | 10,610           | 11,630       | 13,300        | 14,700     |
| PTC   | Q'ty<br>Growth rate    | 1,790            | 2,470<br>138 | 3,400         | 4,300 240  |
| Total | Q'ty<br>Growth rate    | 12,400           | 14,100       | 16,700<br>135 | 19,000     |

70 to 80% of the manufacturers included within the "Others" category in previous table manufacture PTC. 17.9 million pieces total PTC production in 1982 consists of 9.9 million by TDK and 8 million by Matsushita and Murata.

PTC exceeds NTC in growth rate.

The reason is that PTC, in addition to its major application for mosquit killers or TV circuits, currently has become used for VTR head heaters, automobiles or dryers. However, as production of mosquito killers has been on the decrease, Unison so far focussing on mosquito killers, stopped production of PTC thermistors.

## 4) Varistor

Materials: Pbo, Se, Si, Tio, Zno

## (a) Outline

Varistor is a kind of special resistors similar to the thermistor. At the same time, it is the general term for the solid devices which provide excellent resistivity response as impressed voltage fluctuates, showing non-linear volt-ampere characteristics.