

(2) 5-year Demand Forecast

Comprehensive evaluation based on the information from the Central Laboratory of Sanyo Electric Co., Ltd. and Horiba, Ltd.

- 1) Demand for pyroelectric sensor has shown consistent growth since 1983. (approx. 25% per year in volume)
In 1986 and 1987, some 20% annual growth can be expected, supported by active demand from the overseas market.
- 2) In 1988 and on, the demand in the overseas market will somewhat decrease. On the other hand, new domestic demand caused by new application, (e.g. energy conservation in relation to lighting and automatic door) will continue to swell with the expected annual growth of about 20%.
- 3) In terms of materials the demand for Ceramics and PVDF will increase in particular. Demand for single crystal will also expand in volume, however its share in the entire pyroelectric type sensors will decrease. The reason is that, according to the present demand structure, the use of single crystal is limited to mainly for home electric appliances and the development of new applications in the promising field has not yet been accelerated.

4) Price

Along with the development of mass production system, prices will go down by 10% to 15% toward 1990.

Summary

Demand Forecast of Pyroelectric Sensor

Year	1986	1987	1988	1989	1990
Volume (1,000 pcs.)	7,920	9,500	11,400	13,700	16,400
Value (100 mil. yen)	40	46.5	55	65	75

Growth supported mainly by overseas market factors

Mainly by new domestic demand

Product Share by Material Type

1984 Share

Single Crystal	38(%)
Ceramics	52
Organic	10

1990 Share (Prospect)

Single Crystal	30(%)
Ceramics	50
Organic	15