(d) Production by Manufacturers (laminated ceramic capacitor)

(1) Volume

	(Unit: 100 million pcs.)			
Manufacturer	1982	1983	1984	1985 (prospect)
Murata Mfg.	11	21	35	41
TDK	8	17	27	33
Kyocera	6	11	15	18
Matsushita Denshi Buhin	3	6	11	13
Others	10.101	2	4	5 801
Total	29	5,7	92	110

(2) Value

TEN BULLAUV ALL DU	(Unit: 100 million yen)				
Manufacturer	1982	1983	1984	1985 (prospect)	
Murata Mfg.	47	86	137	145	
TDK	38	77	116	142	
Kyocera	17	29	38	45	
Matsushita Denshi Buhin	12	23	40	48	
Others	11	19	24	40	
Total	125	234	355	420	

## Performance Analysis

In 1984, the market for laminated ceramic capacitor was approximately over 9 billion pieces in volume and 35 billion yen in value. The expanding application of laminated ceramic capacitor resulted in production increase by most manufacturers. However, due to the shortage of supply for the chip type, production of the chip type increased. In turn, this has led to the current shortage of the dip type.

2) Piezoelectric Device (Filter, Buzzer)

Materials Used:
PZT, PLZT, ZrO, Crystal, LiNbO3, etc.