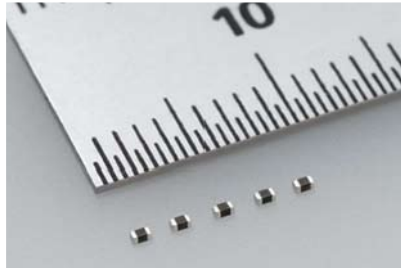


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## Taiyo Yuden: Triples Production Capacity for 0402-Size Multilayer Chip Varistors *Expanding monthly production up to 30 million units to meet huge demand for electrostatic discharge protection in mobile equipment*



To meet huge market demand for the multilayer chip varistor VR Series in the 1005 size (EIA0402 size, 1.0 x 0.5 x 0.5mm), Taiyo Yuden expanded production capacity at the Tamamura Plant in Gunma prefecture in April 2005, tripling production from 10 million units per month to 30 million units per month.

As digital mobile devices such as cell phones have become more compact, their grounding performance has deteriorated while the input-output interfaces have increased as functions have multiplied, so that dealing with the external electrostatics issue has become increasingly important. At the present time, with protection from electrostatic discharge (ESD) provided for more than 30 different parts per mobile device, including circuits in direct contact with people (LCD touch panels and keypads) and circuits that connect to the outside (power terminals, memory cards, earpiece connectors, etc.), demand is rising daily for more compact size, higher performance, and lower price. Taiyo Yuden entered this market and commenced production in the spring of 2004.

In the past, zener diodes were used for these kinds of devices. Multilayer chip varistors are superior to zener diodes because they have no polarity, so that a single unit can function in either direction, exhibit a fast response to ESD and prevent voltage fluctuation in electronic parts, to reduce load, perform capacitor functions, eliminating the need for capacitors in the circuits, and exhibit superior compactness with the 0402 size as the standard, which also keeps prices low. Because of these factors, more than half of the ESD protection parts market, at 50-60% of the total, has already switched over to chip varistors.

Demand for ESD protection parts is expected to grow still more in the future. To firmly establish Taiyo Yuden in the market, the company is tripling its production capacity for the multilayer chip varistor VR series, in the 0402 size used in mobile devices. Further strengthening of production capacity is planned for the first quarter of 2006. Sample price is 5 yen/unit.



## VR Series, 0402 size line-up

	Varistor voltage	Varistor voltage tolerance	Rated voltage	Voltage limits	Electrostatic resistance	Surge current resistance	Electrostatic capacity (Reference value)
Unit	Volts	%	Volts [max]	Volts	K Volts	A	pF
Measurement conditions	1mA DC		DC	0.1A DC	150 pF 330Ω contact discharge	8/20μsec	1KHz1Vrms
VR1005AAA080	8	±20%	5.5	15	15	3	100
VR1005BBA080	8		5.5	15		25	650
VR1005AAA120	12		7.5	22		5	130
VR1005AAA180	18		10	32		10	140
VR1005CCA270	27		15	46		1	15
VR1005AAA270	27		15	46		5	40
VR1005BBA270	27		15	46		10	80

