

Murata's Company Profile



- Murata Manufacturing Co., Ltd. (Murata) was established in October 1944 as a company specializing in the design and manufacture of tubular ceramic capacitor whose material was composed of the titanium oxide.
- This dielectric material was used for temperature compensation in radios with background of the chaotic period after World War II, in which period radio was about the only form of entertainment and information source available.
- This type of temperature compensation is used for the super heterodyne radio, whose performance was far superior compared to those days' conventional super-regeneration system¹ (Figure 1).

Figure 1 Murata's first, original dielectric material which was used for temperature compensation in radios



Temperature compensating
capacitor

Source: available at <http://www.murata.com/corporate/history/index.html#step1>

- Murata, R&D and manufacturing technologies oriented company, is currently a leader in the design, manufacture and sale of ceramic-based passive electronic components and solutions, communication modules and power supply modules.
- With annual net sales of ¥681 billion (\$6.8 billion USD dollars) as of March 2013, Murata is committed to the development of advanced electronic materials and leading edge, multi-functional, high-density modules².

- Murata's market share of capacitors and communication modules are top ranked all over the world³.
- Table 1 shows Murata's recent Net sales, ROA (Return on assets), and ROE (Return on equity), compared to their main competitor TDK, from fiscal year 2003 to 2013 (Table 1).
- Table 2 also shows Murata's sales, order, and backlog by their product categories as of March 2013.

Table 1 Murata's recent Net sales, ROA, and ROE, compared to their main competitor TDK

	Fiscal year ended March 31 for respective year										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Murata's Return on Equity (ROE)	5.6	7.0	6.6	8.0	9.0	9.3	0.4	3.1	6.6	3.8	5.1 (%)
Murata's Return on Assets (ROA)	7.0	9.4	8.5	10.4	12.0	11.7	-1.1	3.8	8.6	5.1	5.7 (%)
Murata's Net Sales	394,955	414,247	424,468	490,784	566,805	631,655	523,946	530,819	617,954	584,662	678,400 (Millions of yen)
TDK's Return on Equity (ROE)	2.1	7.5	5.5	6.6	9.6	9.7	-9.9	2.5	8.4	-0.5	0.2 (%)
TDK's Return on Assets (ROA)	1.6	5.5	4.2	5.1	7.3	7.4	-6.2	1.2	4.2	-0.2	0.1 (%)
TDK's Net Sales	604,865	655,792	657,853	795,180	862,025	866,285	727,400	808,858	871,943	814,497	851,575 (Millions of yen)

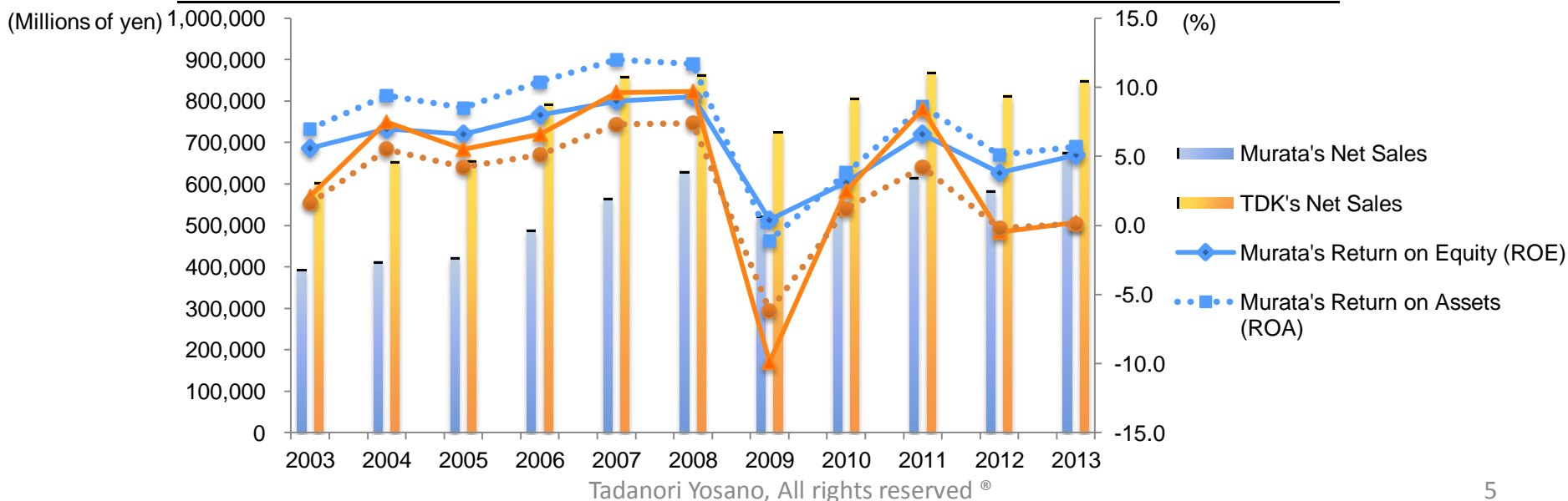


Table 2 Murata's sales, order, and backlog by their product categories as of March 2013



<Sales>	Millions of yen					
	Year ended March 31, 2012		Year ended March 31, 2013		Change	
		%*		%*		%
Capacitors.....	208,386	35.8	228,719	33.7	20,333	9.8
Piezoelectric Components.....	78,608	13.5	80,631	11.9	2,023	2.6
Other Components.....	112,238	19.3	138,857	20.5	26,619	23.7
Components Total.....	399,232	68.6	448,207	66.1	48,975	12.3
Communication Modules.....	133,915	23.0	182,899	26.9	48,984	36.6
Power Supplies and Other Modules....	49,062	8.4	47,252	7.0	(1,810)	(3.7)
Modules Total.....	182,977	31.4	230,151	33.9	47,174	25.8
Net sales.....	582,209	100.0	678,358	100.0	96,149	16.5

* Component ratio

<Components>

Sales of Components for the period under review were increased by 12.3% year-on-year to 448,207 million yen.

Table 2 Murata's sales, order, and backlog by their product categories as of March 2013 (Cont'd)



<Order>	Millions of yen					
	Year ended March 31, 2012		Year ended March 31, 2013		Change	
		%*		%*		%
Capacitors.....	198,675	35.5	231,492	33.5	32,817	16.5
Piezoelectric Components.....	76,090	13.6	80,364	11.6	4,274	5.6
Other Components.....	108,861	19.4	139,185	20.2	30,324	27.9
Components Total.....	383,626	68.5	451,041	65.3	67,415	17.6
Communication Modules.....	126,853	22.7	191,667	27.7	64,814	15.1
Power Supplies and Other Modules....	49,477	8.8	48,318	7.0	(1,159)	(2.3)
Modules Total.....	176,330	31.5	239,985	34.7	63,655	36.1
Total.....	559,956	100.0	691,026	100.0	131,070	23.4

* Component ratio

<Backlog>	Millions of yen					
	As of March 31, 2012		As of March 31, 2013		Change	
		%*		%*		%
Capacitors.....	18,422	31.5	21,195	29.8	2,773	15.1
Piezoelectric Components.....	8,223	14.1	7,956	11.2	(267)	(3.2)
Other Components.....	11,112	19.0	11,440	16.1	328	3.0
Components Total.....	37,757	64.6	40,591	57.1	2,834	7.5
Communication Modules.....	15,291	26.2	24,059	33.8	8,768	57.3
Power Supplies and Other Modules....	5,383	9.2	6,449	9.1	1,066	19.8
Modules Total.....	20,674	35.4	30,508	42.9	9,834	47.6
Total.....	58,431	100.0	71,099	100.0	12,668	21.7

* Component ratio

Murata's key competence



Electric device technologies

- Murata's key technologies are electric devices, whose representative products are capacitors and communication modules.
- Their electric devices cover variety of the markets, from core electronics for mobile phones, computers, and audio-visual equipment to new applications for automotive electronics, environment/energy and healthcare⁴.
- Table 3 shows Murata's current business fields as well as Sales number by application based on Murata's estimate.

Table 3 Murata's current business fields and sales by application

Business field			
Audio and Visual, Communications, Computers, Home Appliances	Automotive Electronics	Environment, Energy	High-tech healthcare

Source: available at <http://www.murata.com/corporate/business/region.html>

Murata's sales by application

	Millions of yen					
	Year ended March 31, 2012		Year ended March 31, 2013		Change	
		%*		%*		%
Audio and Visual	59,041	10.1	47,167	7.0	(11,874)	(20.1)
Communications	264,175	45.4	329,798	48.6	65,623	24.8
Computers and Peripherals	108,827	18.7	134,282	19.8	25,455	23.4
Automotive Electronics	85,365	14.7	102,037	15.0	16,672	19.5
Home and Others	64,801	11.1	65,074	9.6	273	0.4
Net sales	582,209	100.0	678,358	100.0	96,149	16.5

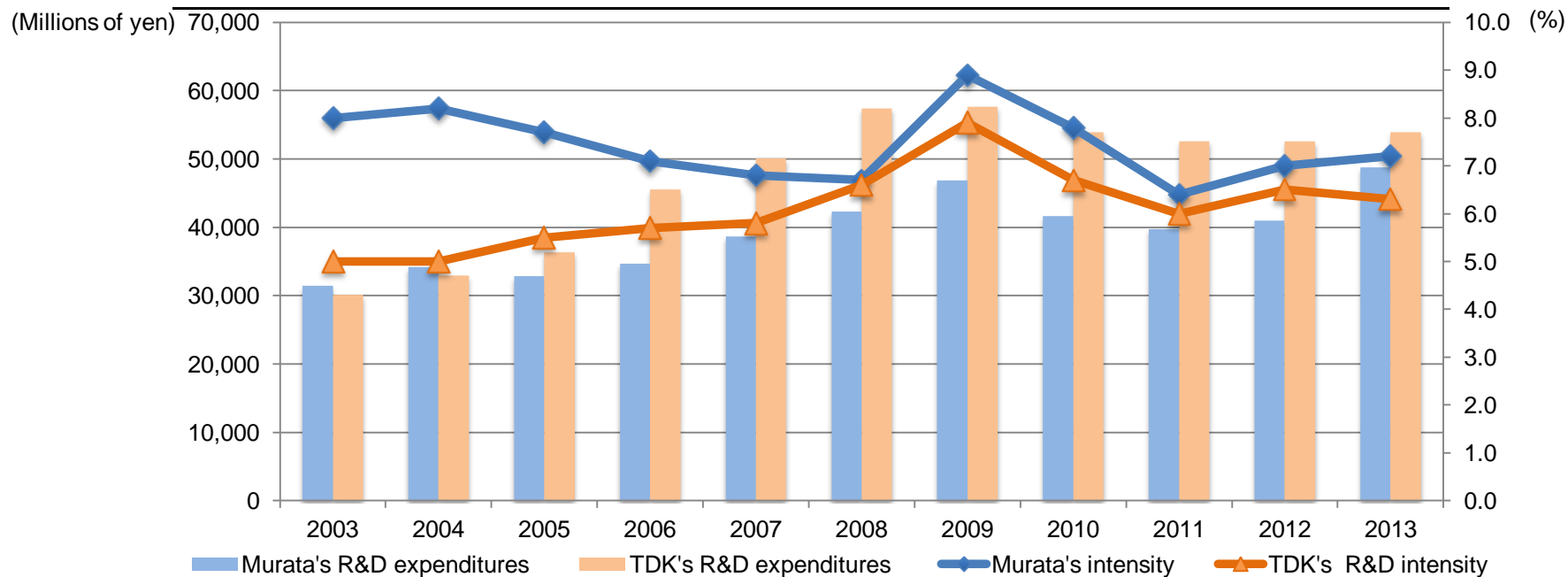
* Component ratio

Source: Murata's Consolidated Financial Flash Report (March 31 2013)

- Since the foundation of Murata, dates back to the discovery of barium titanate, they have always focused on the choice of materials and established a total production system from raw materials to finished product, through research and development.
- Its processes include controlling chemical composition and crystal structure of materials, forming suitable for functionality, ceramic firing for bringing out the electric properties, processing with sophisticated processing technology as well as circuit design technology, analysis and simulation, and quality testing. Every process intricately interfaces with processes behind and ahead⁵.
- Table 4 shows Murata's R&D expenditures as wells as the ratio of R&D expenditures to sales (R&D intensity) from fiscal year 2003 to 2013, compared to their main competitor TDK.

Table 4 The ratio of R&D expenditures to sales (R&D intensity) for Murata and TDK from 2003 to 2013

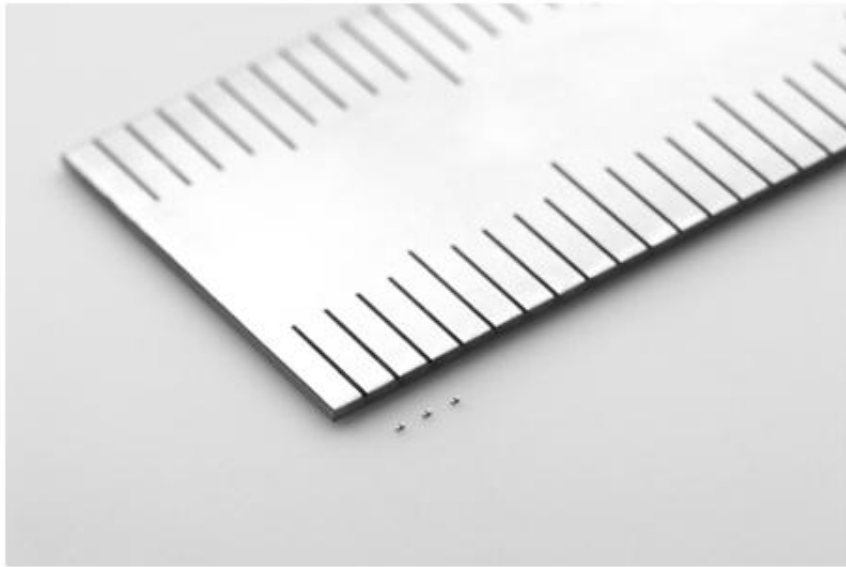
	Fiscal year ended March 31 for respective year										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Murata's R&D intensity	8.0	8.2	7.7	7.1	6.8	6.7	8.9	7.8	6.4	7.0	7.2 (%)
Murata's R&D expenditures	31,427	34,163	32,845	34,696	38,670	42,281	46,832	41,649	39,778	40,978	48,766 (Millions of yen)
TDK's R&D intensity	5.0	5.0	5.5	5.7	5.8	6.6	7.9	6.7	6.0	6.5	6.3 (%)
TDK's R&D expenditures	30,099	32,948	36,348	45,528	50,058	57,387	57,645	53,942	52,608	52,551	53,943 (Millions of yen)



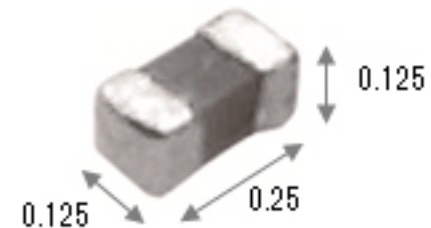
Murata's technologies for tiny but essential materials

- Murata introduced the world's smallest 0402 (millimeter size, 0.4 mm x 0.2 mm) monolithic ceramic capacitor (MLCC) into the market, and this size of MLCC's application has expanded to the the main body of the smartphone⁶.
- Murata further developed the world's smallest 0201 (millimeter size, 0.25 mm x 0.125 mm) MLCC in 2012, which was exhibited in their booth in 'CEATEC JAPAN 2012' held from October 2⁷ (Figure 2).
- Their R&D and manufacturing technologies enable them to mass-produce this type of tiny but essential materials.

Figure 2 Murata's MLCC technologies



External size is L/W/T=0.25 mm x 0.125 mm x 0.125 mm



Footnotes

1. Source: available at <http://www.murata.com/corporate/history/index.html#step1>
2. Source: available at http://www.murata.com/new/news_release/2012/0905/index.html.
3. The Wall Street Journal, “Meet the Smartphone Arms Dealers -TDK, Murata Thrive by Supplying Components to Apple, Samsung-,” Updated February 20th, 2013, available at <http://online.wsj.com/article/SB10001424127887323495104578313540770636244.html>
4. Source: available at <http://www.murata.com/corporate/business/region.html>
5. Source: available at <http://www.murata.com/company/network/01/index01.html>
6. Source: available at http://www.murata.com/new/news_release/2012/0905/index.html
7. Source: available at http://www.murata.com/new/news_release/2012/0905/index.html

2002–2006(Organizational Action, Design, Characteristics of the organizational change)

		2002	2003	2004	2005	2006
		Environmental Report	Environmental Report	Environmental Sustainability Report	CSR Report	CSR Report
President		Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata
Organizational Action					Restructuring our organizational climate	Restructuring our organizational climate
	CEO's 'New Year's Greeting to Employees' (from HP)					Jan 5th 2007 New Year's Greeting to Employees '...to realize rapid growth, we improve CS (Customer satisfaction) and ES (Employee's satisfaction). ...In this year, we would like to have a certain results in regards to our continuous organizational action 'restructuring our organizational climate'...'
The change of CSR report design						
Characteristics of the organizational change		1. Top Message: 'Murata's Approach to Environmental Concerns' 2. Global Environmental Preservation Activities 3. Activities Meeting the Needs of Society	1. Top Message: 'Murata's Approach to Environmental Concerns' 2. Global Environmental Preservation Activities 3. Activities Meeting the Needs of Society	1. Top Message: 'Message from the President' 2. Corporate Profile, 'Financial Highlights' was additionally involved 3. Environmental Report 4. Social Report	1. Top Message: Interview 'Responsibility for the Future' 2. Feature p.9: the page of 'Improving Employees' capability' was newly involved. p.10: Training for Core Management Staff '...We have also adopted a coaching style that values interactive communication to help management staff improve their own capabilities while developing their subordinates' abilities....' 3. CSR Management 'Relationship with Stakeholders' was clearly specified in 1 page. 4. Environment Review 5. Social Review	1. Top Message 2. Feature 3. CSR Management 4.pp.17-18 Economic Review : 'Economic Relations with Stakeholders' was narratively described with 'Financial Highlights' 5. Environmental Review 6. Social Review

2002–2006 (Social Activities)

		2002	2003	2004	2005	2006
		Environmental Report	Environmental Report	Environmental Sustainability Report	CSR Report	CSR Report
President		Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata
Social Activities	The change of description regarding 'social activities'	Activities Meeting the Needs of Society		A Commitment to Stakeholders Social Report	Social Review	Social Review
	The change of narrative description	Occupation Health and safety 'Murata promotes occupation health and safety in the effort to provide a work environment in which each employee can work without risk to health and safety.'	-	Narrative description increased to 6 pages	Narrative description increased to 8 pages	Narrative description increased to 10 pages
	Customers' narrative description	-	-	To Our Customers: Customer Satisfaction & Quality Assurance: p.33 '...As our initiative, Murata has implemented a unique questionnaire survey to determine the level of customer satisfaction achieved...' 862words	Relationship with Our Customers 708words	Relations with Our Customers 899words
	Employees' narrative description	-	-	<ul style="list-style-type: none"> To Our Employees: Our Personnel System 553words To Our Employees: Occupational Health and Safety 565words 	Relationship with Our Employees p. 37 Relationship with our employees: One of the level-based education, 'Coaching training' for Management Level staffs have been introduced: 33 times per year, for total 675 staffs. 1,863words	Relations with Our Employees p. 39: Relationship with our employees: 'Training for Core Management Staff' have been introduced '...We have also adopted a coaching style that values interactive communication to help management staff improve their own capabilities....' 2,175words
	Suppliers' narrative description	-	-	To Our Suppliers: Materials Procurement Policy 789words	Relationship with Our Suppliers 465words	Relations with Our Suppliers 459words
	Shareholders' and Investors' narrative description	-	-	-	-	Shareholders and Investors 814words
	Communities' narrative description	Harmony with the Community	Harmony with the Community	To Our Society and Community: Social Contribution and Tree-planting 600words	Relationship with Society and Communities 455words	Relations with Society and Communities 1,385words

2002–2006 (Environmental Training/Education, Others)

		2002	2003	2004	2005	2006
		Environmental Report	Environmental Report	Environmental Sustainability Report	CSR Report	CSR Report
President		Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata	Yasutaka Murata
Enviromental Traning/Educati on	The change of narrative description	"Each Murata employee supports the promption of bussiness activities that consider the environment, as the contribution of everyone is required in this effort. We bilieve that all employees shiuld understand and practice the environmental vision and objectives set forth by corporate management and the initiatives of the plants and divisiona, as these represent the driving force for environmental preservation.' 73words 'Therefore, we are implementing practical environmental traning and rasing awareness according to this objective.' 33words	"Each Murata employee supports the promption of bussiness activities that consider the environment, as the contribution of everyone is required in this effort. We bilieve that all employees shiuld understand and practice the environmental vision and objectives set forth by corporate management and the initiatives of the plants and divisiona, as these represent the driving force for environmental preservation.' 73words 'Therefore, we are implementing practical environmental traning and rasing awareness according to this objective.' 33words	Same with 2002 73words		Environmental Education: 'To sustain environmentally conscious business operations, it is vital to enhance the environmental awareness of each and every employee. Toward this end, employees should understand the environmental vision and policies set forth by corporate management and the initiatives implemented by the respective divisions. Murata therefore provides its employees with various opportunities to acquire environmental education.'
				Through this approach, we are providing effective envirinmental traning. 9words		
Others					p. 14: Relationship with Stakeholders: 'As a member of society ,a corporation cannot operate their business activities without obtaining trust from society. Recognizing the extreme importance of communication with our stakeholders, Murata worls to build better partnership with its stakeholders.'	
						Development of MURATA BOY: ...To convey to many people the roles of electronic components in an easy-to - understand manner, we haveee developed MURATA BOY, a bicycle- riding robot incorporating Murata electronic components. 'The first version of MURATA BOY was created in 1990. The first MURATA BOY eas a simple robot. His bicycle handle was remotely radio-controlled, and he pedaled the bicycle without falling down by keeping his balance via a built-in controller....About a dozen years later, the Company decided to create the second version of MURATA BOY...'

2007–2012(Organizational Action, Design, Characteristics of the organizational change)

		2007	2008	2009	2010	2011	2012
		CSR Report	CSR Report	CSR Report	Murata Report	Murata Report	Murata Report
President		Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata
Organizational Action		Restructuring our organizational climate	Restructuring our organizational climate	Restructuring our organizational climate	Restructuring our organizational climate	Restructuring our organizational climate	Restructuring our organizational climate
	CEO's 'New Year's Greeting to Employees' (from HP)	Jan 8th 2008 New Year's Greeting to Employees 'We have explored our organizational action 'restructuring our organizational climate' for 3.5 year. We will continuously proceed revolutionary activities...'					
The change of CSR report design		p.1. About This Report 'Scope of Reporting and Disclosure (Online Disclosure)'"This report has been compressed and edited to present the Murata Group's CSR endeavors in an accessible manner. For more detailed information, case studies, environmental performance and other data, please refer to the Murata website...'	Detailed information was described in the web site	Detailed information was described in the web site	· Renewal design · Adoption of Flash application		
Characteristics of the organizational change		1. Top Commitment 'Focusing on Customer satisfaction, Employee Satisfaction and Exchange with Regional Societies' 2. Feature pp.7-8 'Murata by the Numbers' 3. CSR Management 4. Economic Review: pp. 21-22 'Economic Relations with Stakeholders' 5. Murata and the Environment 6. Murata and People	1. Top Message from Top Management 2. Feature pp.7-8 'Murata's Global Network' 3. CSR Management 4. Murata and the Environment 5. Murata and People	1. Top Message from Top Management 2. p.6. Social and Environmental Targets and Result 'As for the social aspect of CSR, we have reported on our activity results thus far. Since fiscal 2009, annual targets have been set up to promote such activities. These targets are subject to deliberation by the CSR Management Committee, and then Group-wide measure are taken to achieve these targets.' 3. Feature pp.2-3 'Murata Global Network' 4. CSR Management 5. Murata and the Environment 6. Murata and People 7. Opinion from the third party	1. Top Message 2. Corporate Report: 'Business Field' (Audio and Visual, Communications, Computers, Home Appliances/Automotive Electronics/Environment, Energy/Healthcare) 3. CSR Report 4. Profile Members of directors, Stock information, Major shareholder 5. Financial Data	1. Top Message 2. Corporate Report 3. CSR Report Feature article: New Businesses and CSR pp.21-32 'We strive to create business domains that contribute to society, such as new energy and health' 4. Profile	1. Top Message 2. Corporate Report pp. 6-7 'Murata's Core Competence' was newly added instead of Murata's business fields 3. CSR Report 4. Feature Article: New Business and CSR (Electric Walking Assist Car) '...We exhibited the unit at CEATEC JAPAN with possible applications in assistive products, baby car and shopping carts in mind, and recieved several inquiries from these industries...' 5. Feature Article: New Business and CSR (Wireless Power Transmission System) 6. Profile

2007–2012 (Social Activities)

		2007	2008	2009	2010	2011	2012
		CSR Report	CSR Report	CSR Report	Murata Report	Murata Report	Murata Report
President		Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata
Social Activities	The change of description regarding 'social activities'	Murata and People	Murata and People	Murata and People	Environmental and Social report were included in Murata Report	same format as 2010	same format as 2010
	The change of narrative description	Narrative description increased to 11 pages	Narrative description increased to 13 pages		Murata Report: ・ Promotion environmental management ・ Employees ・ Society and the community ・ Suppliers ・ CSR management ・ Customers ・ CSR Activities: Targets and Results Self-evaluation: ◯, △ ・ Opinion from the third party	same format as 2010	same format as 2010
	Customers' narrative description	・ Responsibilities to Stakeholders 150words ・ Responsibilities and Conduct toward Customers 1,031words	Customers 1,033words	Customers 1,080words			
	Employees' narrative description	Responsibilities and Conduct toward Employees: 'Murata places great emphasis on employees satisfaction, through comfortable working conditions and rewarding employment. We have established workplace environments where employees can fulfill their potential in their work based on appropriate treatment and deployment of personnel and commitment to safety.' 1,432words	Employees: 2,473words	Employees 2,382words	Employees Employees related description were shown on the top of social review	same format as 2010	same format as 2010
	Suppliers' narrative description	Responsibilities and Conduct toward Suppliers 1,136words	Suppliers 1,471words	Suppliers 700words	Suppliers		
	Shareholders' and Investors' narrative description	Accountability and Conduct for Shareholders and Investors 663words	Shareholders and Investors 664words	Shareholders and Investors 635words			
	Communities' narrative description	Responsibilities and Conduct toward Societies and Local Communities 867words	Society and Local Communities 1,154words	Society and Local Communities 965words	Society and Local Communities		

2007–2012 (Environmental Training/Education, Others)

		2007	2008	2009	2010	2011	2012
		CSR Report	CSR Report	CSR Report	Murata Report	Murata Report	Murata Report
President		Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata	Tsuneo Murata
Environmental Training/Education	The change of narrative description	Environmental Education and Promotion: Raising the Environmental Awareness of Every Employee: 'Murata provides various educational opportunities to enhance understanding by all employees of environmental vision and policies set forth by corporate engagement and the initiatives implemented by the respective divisions.'	Environmental Education and Promotion: 'Murata conducts environmental education for all employees to improve their environmental awareness...'	Environmental education and enlightenment were moved into the web site.			
Others							