Electronic Components Sector

Component Data Deposition: METI production statistics (electronic components, semiconductors) for May 2026: ABF substrates remain strong

Japan Equity Research

Technology - Electronic Components

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METI released May 2026 production statistics on July 14. Domestic production value (in USD terms) for both electronic components and semiconductors fell broadly in line with seasonality in May, reflecting the Golden Week holidays. Within electronic components, MLCCs came in well below typical seasonal levels, suggesting a lack of momentum. That said, METI's MLCC production-value data and the Ministry of Finance's (MoF) MLCC export value appear to have diverged of late. Given the gradual uptrend in the MoF's MLCC export value, we see no need for undue concern at this point. Among passive components, aluminum electrolytic capacitors remain solid. Meanwhile, production value and ASP for rigid module substrates (including ABF substrates/FC-BGA) continue to trend upward, a positive signal for Ibiden. Our top picks in the electronic components sector are Rohm and Murata Manufacturing.

We expect a strong recovery in industrial machinery demand heading into the electronic components sector's April–June results, with automotive demand also broadly recovering from inventory corrections. By stock, we recommend Ibiden, Rohm, Murata Manufacturing, and Hirose Electric (all Overweight rated). Among passive-component stocks, Murata is our top pick. For Taiyo Yuden, Nichicon, and Nippon Chemi-Con, near-term quarterly earnings visibility is low, and with quarterly profit levels still low relative to share-price gains, volatility could rise depending on results. We initially look to confirm April–June earnings levels. For Ibiden, beyond the strength in ABF substrates, we are watching for any new capacity-expansion announcements. For MLCCs, a book-to-bill ratio of 1.3 has never persisted for two consecutive quarters in past cycles, but we believe it held at 1.3–1.4 in April–June as well, reflecting demand for AI servers. At Rohm, we expect strong sales and order trends, driven by a recovery in the analog and discrete markets, where its automotive and industrial machinery exposure is high. In particular, supply-demand for Tier 1 makers' Si MOSFETs and similar products is tightening, and we believe Tier 2 makers are beginning to benefit as well. That said, we think destocking continued through April–June, and we expect earnings to expand from July–September. At Hirose Electric, we expect April–June results to beat guidance, led by industrial machinery, and we maintain a bullish stance on fundamentals.

- **Our view:** In May, both electronic components and semiconductors fell broadly in line with the past 20 years' seasonality (MoM). Within electronic components, passive components (MLCCs in particular) undershot seasonality, and the trend line continues to show sluggish momentum. MLCCs are gradually recovering in volume terms, but production value remains sluggish. Production value for rigid module substrates (including ABF substrates/FC-BGA) rose considerably MoM even excluding the impact of the weaker yen, maintaining its uptrend. In semiconductors, memory stood out with a considerable jump in both production value and ASP.
- **MLCCs:** For MLCCs, the MoF trade statistics and METI production statistics appear to have diverged since December 2025. On value in particular, METI put MLCC production value in May at US$370 million (-17% YoY, -17%

See page 13 for analyst certification and important disclosures, including non-US analyst disclosures.

MoM), while MoF export value in May was US$411 million (+9% YoY, -12% MoM), with production value falling short of export value. The criteria for many of METI's production data are vague, while MoF trade data shows growth for both export value and average unit prices on a USD basis, so we place more emphasis on MoF trade data.

- **Electronic components:** Domestic production value (in USD terms) of electronic components in May 2026 fell 13% YoY and 11% MoM for passive components, was flat YoY and fell 4% MoM for mechanical components, rose 12% and 3% for electronic substrates, and fell 7% and 11% for electronic circuit mounting boards. Overall, in May, domestic production value (in USD terms) fell broadly in line with seasonality. Passive components fell short of seasonality, suggesting a lack of momentum. For MLCCs, production volume fell 19% MoM, production value (in USD terms) fell 17% MoM, and ASP (in USD terms) rose 2% MoM; production value declined considerably on the sharp drop in volume. The trendline is also moving from flat to slightly lower, likewise pointing to a lack of momentum. In contrast, aluminum electrolytic capacitors are performing well, with production value maintaining a gradual uptrend. Mechanical components fell in line with seasonality. Connectors likewise fell in line with seasonality, and the production-value trendline remains broadly flat. Electronic substrates outpaced seasonality, and the trendline continues to show gradual growth. In particular, rigid module substrates (including ABF substrates/FC-BGA) ran considerably above seasonality, sustaining strong growth even excluding the impact of the weaker yen. A further jump in ASP resulted in an even clearer uptrend. Electronic circuit mounting boards moved broadly in line with seasonality.
- **Semiconductors:** YoY and MoM changes in May 2026 domestic production value (USD) were –19% YoY and –5% MoM for discrete semiconductors, –21% and +1% for MCUs, +10% and flat for logic ICs, and +548% and +30% for memory. In May, output fell short of seasonality overall, except for memory. Memory saw a considerable jump in both production value and ASP, rising at an unprecedented pace.

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Figure 1: Electronic Components: Summary of METI current production statistics (May 2026)

Production volume	mn units/m2	YoY	MoM
Passive components	115,697.0	11.3%	-17.5%
Registers	11,315.4	5.4%	-9.4%
Capacitors	91,758.1	16.0%	-18.6%
Aluminum electrolytic capacitors	826.1	6.9%	-4.2%
Ceramic capacitors	90,830.5	16.1%	-18.7%
Other capacitors	101.6	-0.7%	-6.0%
Transformers	1.0	49.2%	-0.3%
Inductors	11,188.3	-10.6%	-16.5%
Functional components	1,434.2	-8.4%	-12.4%
Quartz crystals	333.6	20.6%	0.5%
Filters	700.2	-19.9%	-22.2%
Multiple Components	400.3	-3.5%	-1.1%
Mechanical Components	2,576.3	-6.0%	-9.8%
Switches	678.9	9.9%	-8.4%
Connectors	1,864.1	-10.7%	-10.1%
PWB connectors	926.9	-12.5%	-6.9%
Other connectors	937.2	-8.9%	-13.1%
Electronic circuit boards	680.0	-6.3%	-4.3%
Rigid PWB	535.1	-5.6%	-5.3%
Flexible PWB	112.8	-1.5%	4.5%
Module boards	32.1	-27.2%	-14.6%
Rigid Module boards	20.5	9.9%	8.0%
Electronic circuit jisso boards	1,153.9	-2.7%	-7.7%
Printed wiring jisso boards	811.2	-1.4%	-8.3%
Module jisso boards	342.7	-5.7%	-6.3%

Production value	JPY mn	YoY	MoM
Passive components	118,678	-4.5%	-11.9%
Registers	10,490	7.7%	-13.9%
Capacitors	81,042	-5.3%	-13.5%
Aluminum electrolytic capacitors	16,562	10.5%	0.4%
Ceramic capacitors	58,533	-9.7%	-17.4%
Other capacitors	5,947	3.7%	-5.8%
Transformers	913	81.2%	-3.6%
Inductors	7,934	0.3%	-10.7%
Functional components	18,299	-10.9%	-4.1%
Quartz crystals	5,129	14.8%	2.2%
Filters	4,991	-30.4%	-15.8%
Multiple Components	8,179	-8.1%	0.5%
Mechanical Components	33,413	8.8%	-4.7%
Switches	4,434	16.4%	-4.3%
Connectors	27,038	8.4%	-3.7%
PWB connectors	17,318	4.1%	-3.0%
Other connectors	9,720	16.9%	-5.0%
Electronic circuit boards	63,392	22.7%	2.0%
Rigid PWB	33,402	16.8%	-7.6%
Flexible PWB	1,926	-5.6%	-19.4%
Module boards	28,064	33.6%	19.0%
Rigid Module boards	27,838	35.7%	19.5%
Electronic circuit jisso boards	26,570	2.2%	-11.0%
Printed wiring jisso boards	14,314	4.6%	-2.6%
Module jisso boards	12,256	-0.5%	-19.2%

Production value	$ mn	YoY	MoM
Passive components	750.0	-12.6%	-11.4%
Registers	66.3	-1.5%	-13.3%
Capacitors	512.1	-13.3%	-13.0%
Aluminum electrolytic capacitors	104.7	1.1%	0.9%
Ceramic capacitors	369.9	-17.4%	-16.9%
Other capacitors	37.6	-5.1%	-5.2%
Transformers	5.8	65.8%	-3.0%
Inductors	50.1	-8.2%	-10.2%
Functional components	115.6	-18.5%	-3.5%
Quartz crystals	32.4	5.0%	2.8%
Filters	31.5	-36.3%	-15.3%
Multiple Components	51.7	-15.9%	1.1%
Mechanical Components	211.2	-0.4%	-4.1%
Switches	28.0	6.5%	-3.7%
Connectors	170.9	-0.8%	-3.2%
PWB connectors	109.4	-4.7%	-2.4%
Other connectors	61.4	7.0%	-4.5%
Electronic circuit boards	400.6	12.3%	2.7%
Rigid PWB	211.1	6.8%	-7.1%
Flexible PWB	12.2	-13.6%	-19.0%
Module boards	177.4	22.2%	19.7%
Rigid Module boards	175.9	24.2%	20.3%
Electronic circuit jisso boards	167.9	-6.5%	-10.5%
Printed wiring jisso boards	90.5	-4.3%	-2.0%
Module jisso boards	77.5	-8.9%	-18.7%

Source: METI, J.P. Morgan.

Figure 2: Semiconductors: Summary of METI current production statistics (May 2026)

Production volume	mn units	YoY	MoM
Discrete Semiconductors	747.7	-6.9%	-3.0%
Diodes and Rectifiers	511.3	-10.4%	-3.3%
Si-Transistors	96.7	1.6%	5.2%
Si MOSFET	126.8	6.7%	-6.3%
IGBT	12.8	-29.9%	-11.8%
MCU	44.2	-26.2%	5.6%
Logic IC	158.5	17.3%	-12.5%
Memory	47.9	11.0%	-12.6%

Production value	JPY mn	YoY	MoM
Discrete Semiconductors	31,826	-11.3%	-5.7%
Diodes and Rectifiers	3,332	-22.0%	-14.1%
Si-Transistors	1,441	-14.3%	10.8%
Si MOSFET	4,871	-0.4%	-9.8%
IGBT	22,182	-11.4%	-4.3%
MCU	5,800	-13.3%	0.1%
Logic IC	15,365	19.8%	-0.5%
Memory	286,577	608.6%	28.9%

Production value	$ mn	YoY	MoM
Discrete Semiconductors	201.1	-18.8%	-5.2%
Diodes and Rectifiers	21.1	-28.6%	-13.5%
Si-Transistors	9.1	-21.6%	11.5%
Si MOSFET	30.8	-8.8%	-9.3%
IGBT	140.2	-18.9%	-3.7%
MCU	36.7	-20.7%	0.7%
Logic IC	97.1	9.6%	0.1%
Memory	1,811.0	548.4%	29.6%

Source: METI, J.P. Morgan.

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Figure 3: Electronic components sector: Valuation summary

Ticker	Company	Share Price (JPY)	Price Target (JPY)	Return	Rating	Market Capitalization (JPY mn)	P/E FY26E (x)	P/E FY27E (x)	P/E FY28E (x)	EPS FY26E (x)	EPS FY27E (x)	EPS FY28E (x)	EV/EBITDA FY26E (x)	EV/EBITDA FY27E (x)	EV/EBITDA FY28E (x)	P/B FY26E (x)	P/B FY27E (x)	P/B FY28E (x)
6981	Murata Mfg.	9,100	15,200	67.0%	OW	21,750,060	51.38	31.80	21.27	177	286	428	29.53	19.39	13.39	5.90	5.22	4.39
6976	Taiyo Yuden	11,855	22,500	89.8%	OW	2,679,272	67.43	29.82	18.40	176	398	644	28.21	18.06	12.68	4.16	3.73	3.15
6762	TDK	3,234	5,500	70.1%	OW	7,190,338	27.32	21.45	17.17	118	151	188	12.10	10.04	8.31	2.63	2.44	2.24
6971	Kyocera	3,660	3,900	6.6%	N	5,557,199	32.06	28.53	25.52	114	128	143	18.25	15.84	13.84	1.44	1.52	1.59
6963	Rohm	5,208	8,000	53.6%	OW	2,402,372	41.52	30.48	24.40	125	171	213	21.84	17.81	12.90	2.74	2.60	2.33
6996	Nichicon	3,255	4,500	38.2%	OW	310,450	27.33	21.07	17.21	119	154	189	10.14	8.50	7.24	1.75	1.65	1.53
6997	Nippon Chemi-con	3,665	4,300	17.3%	N	153,112	23.29	16.32	11.57	157	225	317	10.96	8.95	7.15	1.81	1.61	1.40
6594	Nidec	2,608	1,800	-31.0%	UW	3,323,690	14.80	12.92	-	176	202	-	6.45	5.45	-	1.46	1.32	-
6479	MinebeaMitsumi	4,151	5,500	32.5%	OW	2,070,487	18.22	15.52	13.67	228	268	304	11.42	9.87	8.57	1.73	1.59	1.46
4062	Ibiden	17,980	28,500	58.5%	OW	6,576,779	66.17	49.39	36.74	272	364	489	30.72	24.50	19.82	8.09	7.04	5.98
6806	Hirose Elec	26,975	33,300	23.4%	OW	1,010,533	22.44	18.76	16.39	1,202	1,438	1,646	12.00	10.31	9.23	2.26	2.15	2.04
6807	JAE	2,372	2,280	-3.9%	N	166,758	24.64	15.47	12.39	96	153	192	4.90	4.13	3.61	1.08	1.04	0.99
6770	AlpsAlpine	2,121	2,480	17.0%	N	442,429	14.85	13.22	11.83	143	160	179	4.62	4.19	3.91	0.89	0.86	0.82
5334	Niterra	10,000	13,300	33.0%	OW	2,189,732	17.44	15.02	13.66	574	666	732	10.28	8.76	7.76	2.35	2.14	1.95
6727	Wacom	758	1,300	71.5%	OW	106,245	10.40	9.96	9.53	73	76	79	5.09	4.11	3.16	2.02	1.60	1.31
7915	NISSHA	1,327	1,460	10.0%	N	65,398	18.87	13.49	9.48	70	98	140	5.62	4.97	4.11	0.54	0.53	0.51
Simple Average		-	-	34.6%	-	3,499,678	29.89	21.45	-	239	309	-	13.88	10.93	-	2.55	2.31	-

Ticker	Company	Share Price (JPY)	Price Target (JPY)	Return	Rating	Market Capitalization (JPY mn)	ROE FY26E	ROE FY27E	ROE FY28E	DPS FY26E (JPY)	DPS FY27E (JPY)	DPS FY28E (JPY)	Dividend Yield FY26E	Dividend Yield FY27E	Dividend Yield FY28E	Dividend Payout Ratio FY26E	Dividend Payout Ratio FY27E	Dividend Payout Ratio FY28E
6981	Murata Mfg.	9,100	15,200	67.0%	OW	21,750,060	11.6%	17.4%	22.4%	70.0	85.0	100.0	0.8%	0.9%	1.1%	39.5%	29.7%	23.4%
6976	Taiyo Yuden	11,855	22,500	89.8%	OW	2,679,272	6.9%	14.4%	20.3%	95.0	105.0	125.0	0.8%	0.9%	1.1%	54.0%	26.4%	19.4%
6762	TDK	3,234	5,500	70.1%	OW	7,190,338	9.9%	11.8%	13.6%	40.0	54.0	66.0	1.2%	1.7%	2.0%	33.8%	35.8%	35.0%
6971	Kyocera	3,660	3,900	6.6%	N	5,557,199	4.4%	5.2%	6.1%	56.0	56.0	56.0	1.5%	1.5%	1.5%	49.1%	43.6%	39.0%
6963	Rohm	5,208	8,000	53.6%	OW	2,402,372	7.8%	10.2%	11.5%	50.0	50.0	65.0	1.0%	1.0%	1.2%	39.9%	29.3%	30.5%
6996	Nichicon	3,255	4,500	38.2%	OW	310,450	6.5%	8.1%	9.2%	39.0	41.0	43.0	1.2%	1.3%	1.3%	32.7%	26.5%	22.7%
6997	Nippon Chemi-con	3,665	4,300	17.3%	N	153,112	7.2%	9.5%	12.0%	25.0	25.0	25.0	0.7%	0.7%	0.7%	15.9%	11.1%	7.9%
6594	Nidec	2,608	1,800	-31.0%	UW	3,323,690	10.3%	10.6%	-	0.0	0.0	-	0.0%	0.0%	-	0.0%	0.0%	-
6479	MinebeaMitsumi	4,151	5,500	32.5%	OW	2,070,487	9.8%	10.7%	11.1%	60.0	62.0	65.0	1.4%	1.5%	1.6%	26.3%	23.2%	21.4%
4062	Ibiden	17,980	28,500	58.5%	OW	6,576,779	13.7%	16.1%	18.6%	35.0	55.0	65.0	0.2%	0.3%	0.4%	12.9%	15.1%	13.3%
6806	Hirose Elec	26,975	33,300	23.4%	OW	1,010,533	10.1%	11.6%	12.6%	540.0	580.0	620.0	2.0%	2.2%	2.3%	44.9%	40.3%	37.7%
6807	JAE	2,372	2,280	-3.9%	N	166,758	4.4%	6.9%	8.2%	50.0	60.0	70.0	2.1%	2.5%	3.0%	51.9%	39.1%	36.6%
6770	AlpsAlpine	2,121	2,480	17.0%	N	442,429	6.4%	7.0%	7.5%	64.0	72.0	76.0	3.0%	3.4%	3.6%	44.8%	44.9%	42.4%
5334	Niterra	10,000	13,300	33.0%	OW	2,189,732	14.0%	14.9%	14.9%	220.0	250.0	280.0	2.2%	2.5%	2.8%	38.4%	37.6%	38.3%
6727	Wacom	758	1,300	71.5%	OW	106,245	22.3%	17.9%	15.1%	24.0	24.0	24.0	3.2%	3.2%	3.2%	32.9%	31.5%	30.2%
7915	NISSHA	1,327	1,460	10.0%	N	65,398	2.9%	4.0%	5.5%	50.0	50.0	50.0	3.8%	3.8%	3.8%	71.1%	50.8%	35.7%
Simple Average		-	-	34.6%	-	3,499,678	9.3%	11.0%	-	-	-	-	1.6%	1.7%	-	36.8%	30.3%	-

Ticker	Company	Share Price (JPY)	Price Target (JPY)	Return	Rating	Market Capitalization (JPY mn)	ROIC FY26E	ROIC FY27E	ROIC FY28E	FCF FY26E (JPY mn)	FCF FY27E (JPY mn)	FCF FY28E (JPY mn)	FCF Yield FY26E	FCF Yield FY27E	FCF Yield FY28E	Net Debt FY26E (JPY mn)	Net Debt FY27E (JPY mn)	Net Debt FY28E (JPY mn)
6981	Murata Mfg.	9,100	15,200	67.0%	OW	21,750,060	11.2%	17.1%	22.1%	245,082	432,293	666,078	1.1%	2.0%	3.1%	-515,785	-633,825	-927,113
6976	Taiyo Yuden	11,855	22,500	89.8%	OW	2,679,272	5.6%	11.2%	16.1%	23,849	51,374	87,146	0.9%	1.9%	3.3%	66,158	54,844	13,227
6762	TDK	3,234	5,500	70.1%	OW	7,190,338	8.1%	9.6%	11.1%	94,635	246,090	337,345	1.3%	3.4%	4.7%	-269,105	-350,003	-495,747
6971	Kyocera	3,660	3,900	6.6%	N	5,557,199	2.8%	3.5%	4.4%	37,228	113,868	118,689	0.7%	2.0%	2.1%	-228,990	-251,046	-272,541
6963	Rohm	5,208	8,000	53.6%	OW	2,402,372	5.1%	6.6%	7.8%	36,826	54,914	85,896	1.5%	2.3%	3.6%	11,972	25,631	-126,264
6996	Nichicon	3,255	4,500	38.2%	OW	310,450	5.7%	6.9%	7.9%	6,600	9,373	12,099	2.1%	3.0%	3.9%	-26,066	-26,327	-29,103
6997	Nippon Chemi-con	3,665	4,300	17.3%	N	153,112	4.5%	5.6%	7.1%	5,548	6,833	9,157	3.6%	4.5%	6.0%	52,507	49,571	46,936
6594	Nidec	2,608	1,800	-31.0%	UW	3,323,690	7.2%	7.6%	-	200,731	229,204	-	6.0%	6.9%	-	141,080	-44,638	-
6479	MinebeaMitsumi	4,151	5,500	32.5%	OW	2,070,487	6.4%	7.4%	7.9%	72,494	97,443	125,943	3.5%	4.7%	6.1%	240,308	174,250	80,330
4062	Ibiden	17,980	28,500	58.5%	OW	6,576,779	10.9%	13.1%	15.4%	-48,888	-95,004	-18,364	-0.7%	-1.4%	-0.3%	64,851	202,152	263,496
6806	Hirose Elec	26,975	33,300	23.4%	OW	1,010,533	9.2%	10.7%	11.7%	31,463	39,842	46,819	3.1%	3.9%	4.6%	-133,067	-132,013	-132,950
6807	JAE	2,372	2,280	-3.9%	N	166,758	4.0%	6.0%	7.4%	7,288	10,337	12,908	4.4%	6.2%	7.7%	-8,614	-13,219	-18,779
6770	AlpsAlpine	2,121	2,480	17.0%	N	442,429	5.9%	6.4%	6.8%	10,959	18,386	22,265	2.5%	4.2%	5.0%	-53,801	-50,127	-52,900
5334	Niterra	10,000	13,300	33.0%	OW	2,189,732	10.4%	11.3%	11.7%	106,559	126,650	141,667	4.9%	5.8%	6.5%	-15,975	-76,096	-144,485
6727	Wacom	758	1,300	71.5%	OW	106,245	25.6%	20.2%	16.9%	9,799	10,236	10,693	9.2%	9.6%	10.1%	-26,812	-39,699	-53,147
7915	NISSHA	1,327	1,460	10.0%	N	65,398	2.1%	2.9%	3.8%	5,061	4,663	6,633	7.7%	7.1%	10.1%	26,256	24,223	20,210
Simple Average		-	-	34.6%	-	3,499,678	7.8%	9.1%	-	-	-	-	3.2%	4.1%	-	-	-	-

Source: Company data, J.P. Morgan estimates.
Note: The share prices and market caps are as of the market close on July 15, 2026.

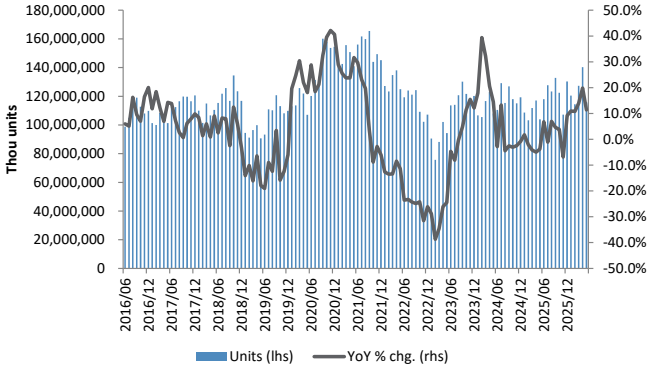
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Electronic Components

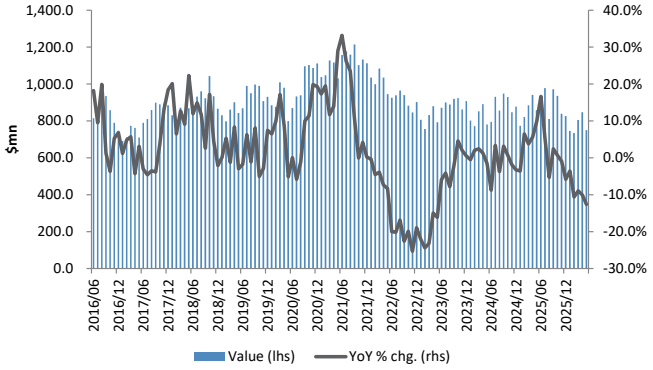
The following charts display trends in domestic production quantity and production value for major electronic components and semiconductors.

Figure 4: Passive Components: Production quantity ('000 units)



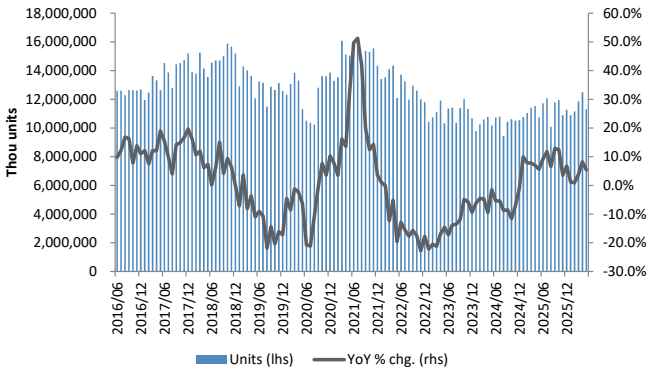
Source: METI, J.P. Morgan.

Figure 5: Passive Components: Production value ($mn)



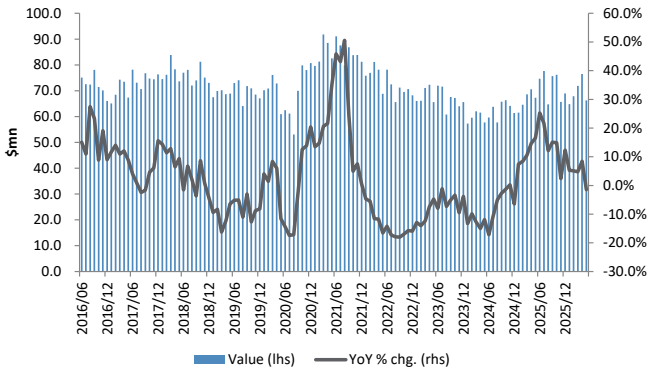
Source: METI, J.P. Morgan.

Figure 6: Resistors: Production quantity ('000 units)



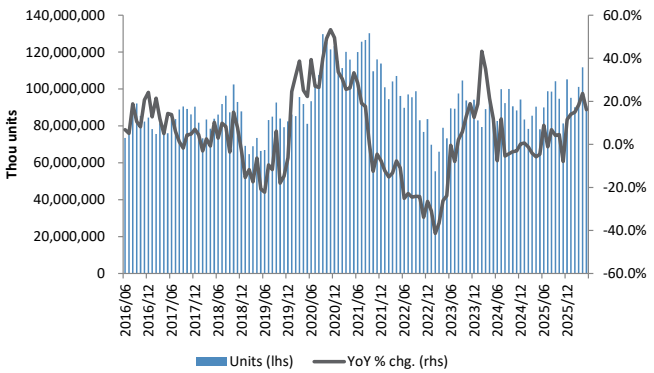
Source: METI, J.P. Morgan.

Figure 7: Resistors: Production value ($mn)



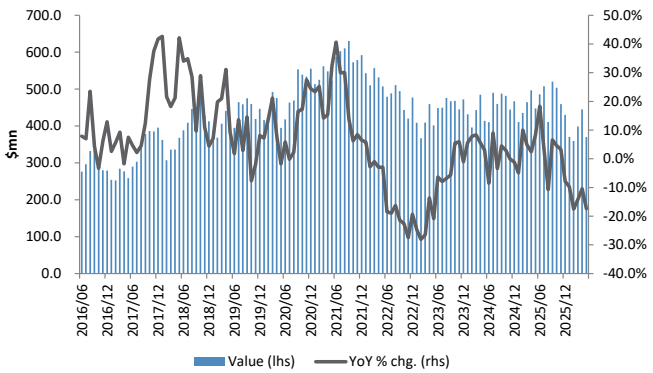
Source: METI, J.P. Morgan.

Figure 8: Ceramic capacitors: Production quantity ('000 units)



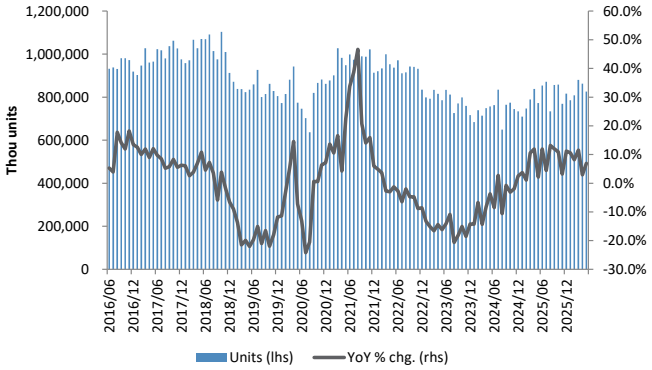
Source: METI, J.P. Morgan.

Figure 9: Ceramic capacitors: Production value ($mn)



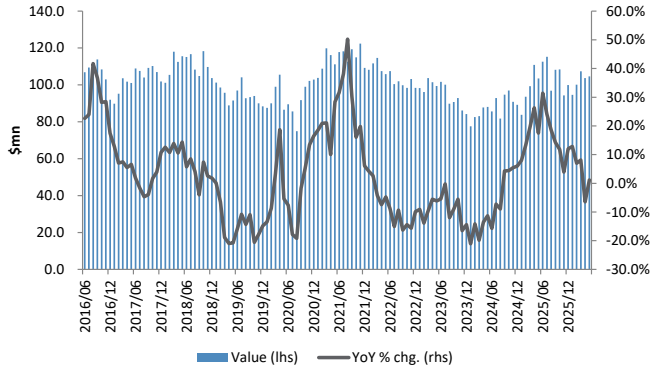
Source: METI, J.P. Morgan.

Figure 10: Aluminum electrolytic capacitors: Production quantity ('000 units)



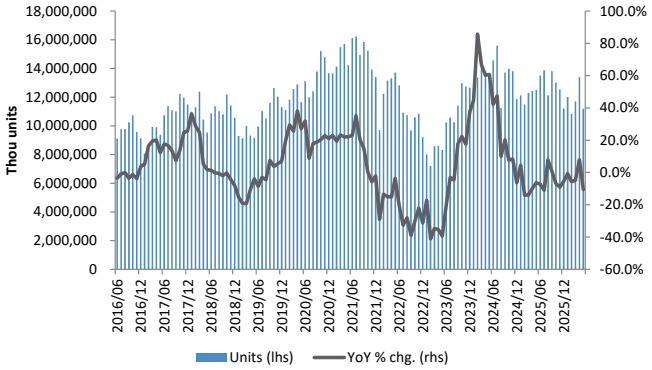
Source: METI, J.P. Morgan.

Figure 11: Aluminum electrolytic capacitors: Production value ($mn)



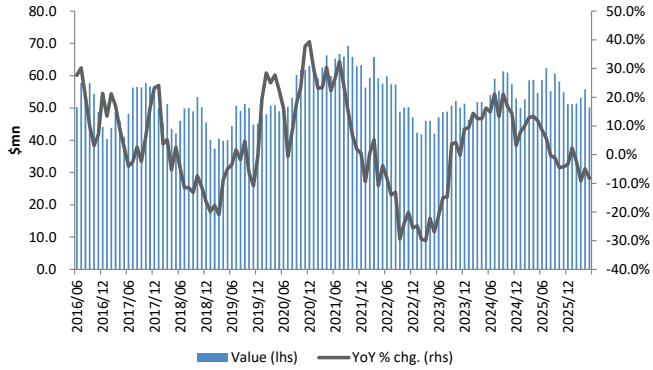
Source: METI, J.P. Morgan.

Figure 12: Inductors: Production quantity ('000 units)



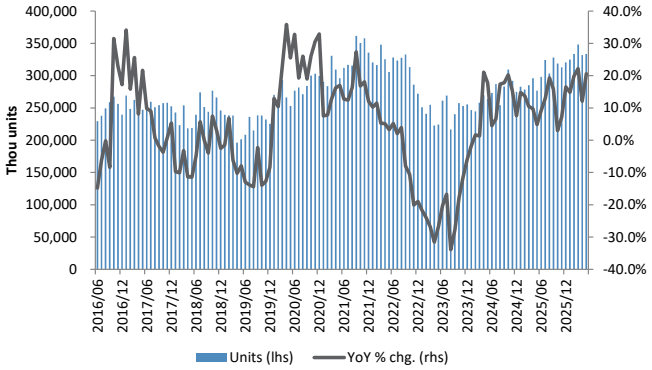
Source: METI, J.P. Morgan.

Figure 13: Inductors: Production value ($mn)



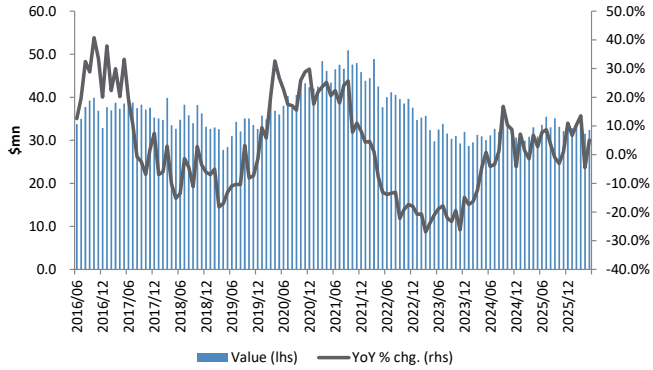
Source: METI, J.P. Morgan.

Figure 14: Quartz crystals: Production quantity ('000 units)



Source: METI, J.P. Morgan.

Figure 15: Quartz crystals: Production value ($mn)

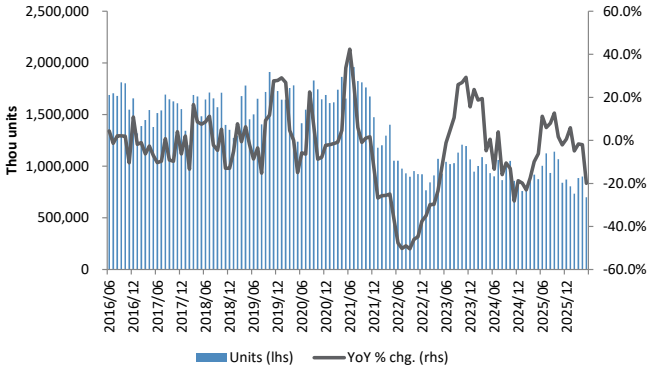


Source: METI, J.P. Morgan.

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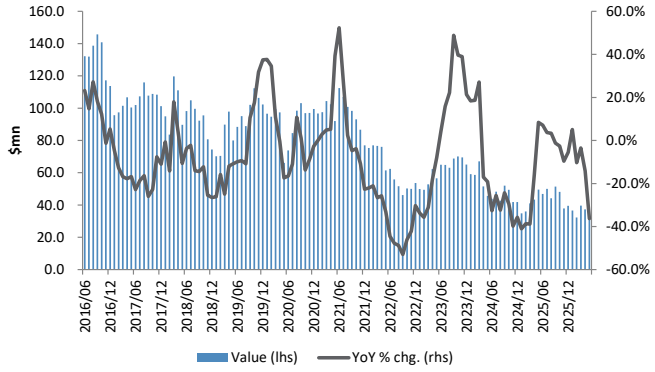
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Figure 16: Filters: Production quantity ('000 units)



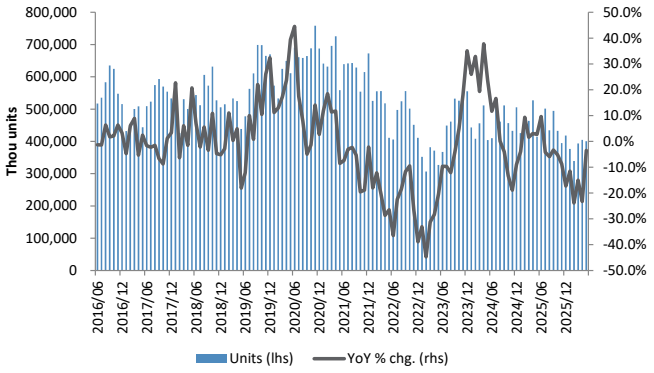
Source: METI, J.P. Morgan.

Figure 17: Filters: Production value ($mn)



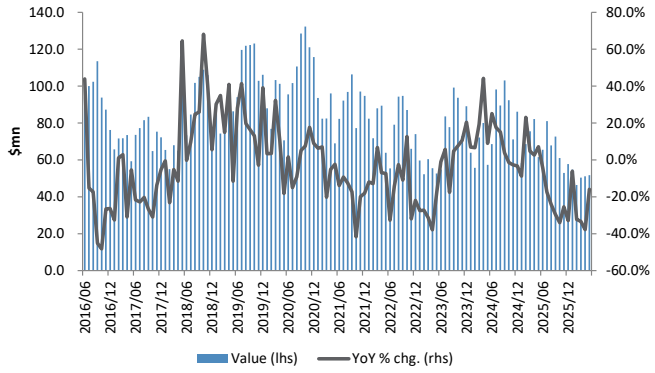
Source: METI, J.P. Morgan.

Figure 18: Multiple components: Production quantity ('000 units)



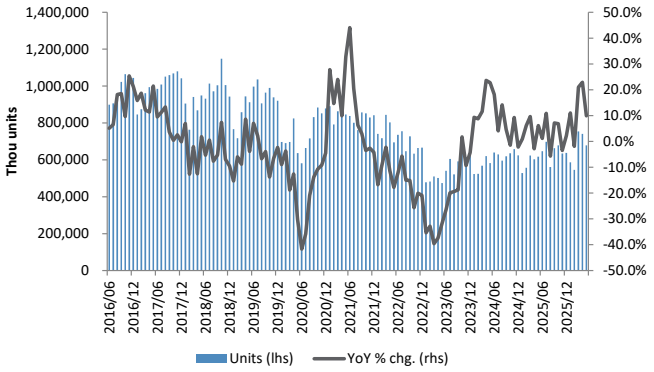
Source: METI, J.P. Morgan.

Figure 19: Multiple components: Production value ($mn)



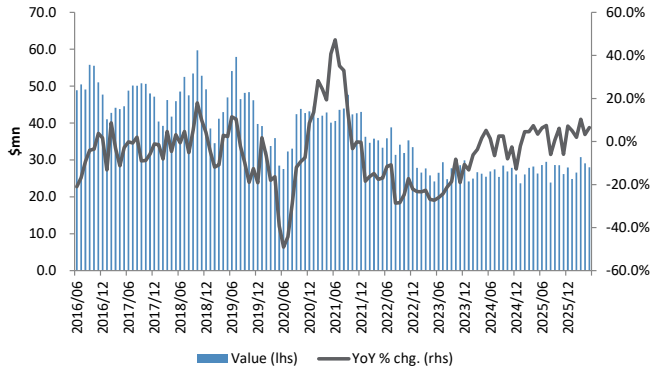
Source: METI, J.P. Morgan.

Figure 20: Switches: Production quantity ('000 units)



Source: METI, J.P. Morgan.

Figure 21: Switches: Production value ($mn)

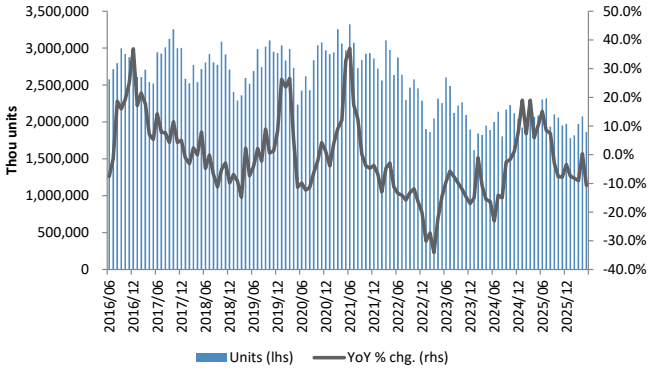


Source: METI, J.P. Morgan.

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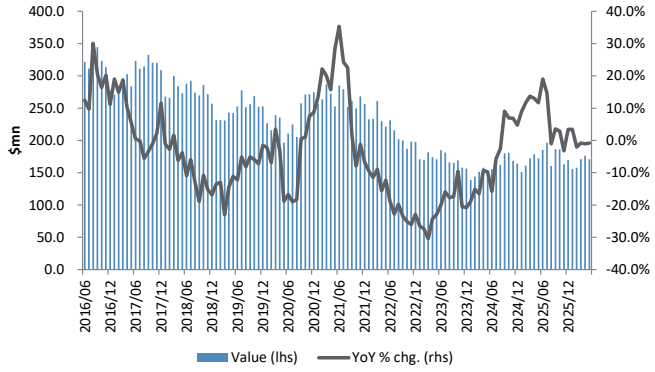
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Figure 22: Connectors: Production quantity ('000 units)



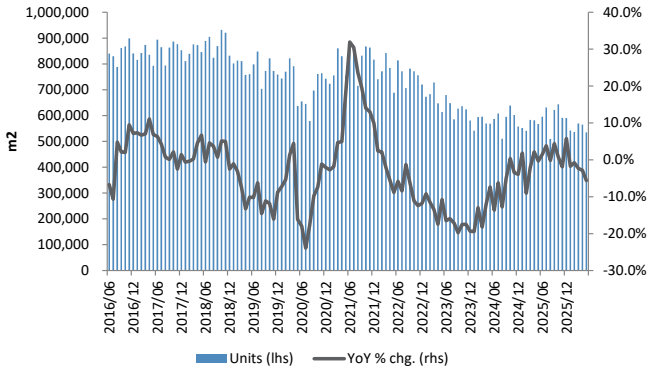
Source: METI, J.P. Morgan.

Figure 23: Connectors: Production value ($mn)



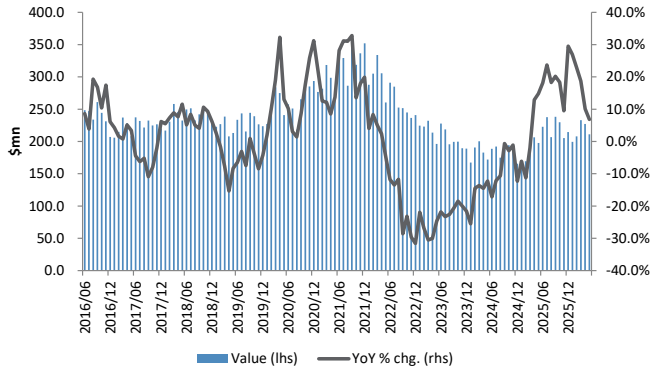
Source: METI, J.P. Morgan.

Figure 24: Rigid PWBs: Production quantity (square meters)



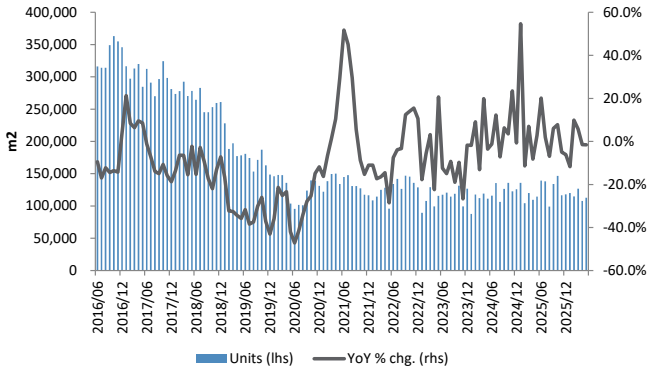
Source: METI, J.P. Morgan.

Figure 25: Rigid PWBs: Production value ($mn)



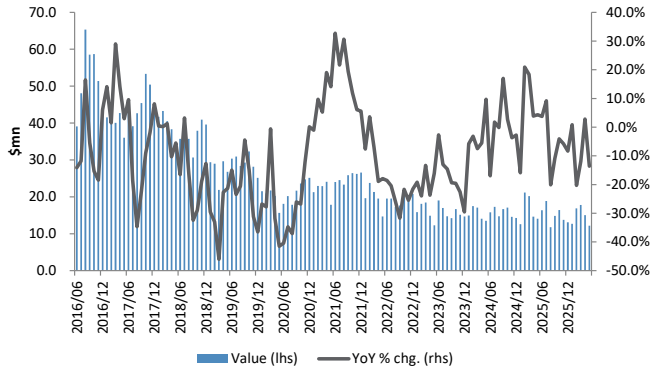
Source: METI, J.P. Morgan.

Figure 26: Flexible PWBs: Production quantity (square meters)



Source: METI, J.P. Morgan.

Figure 27: Flexible PWBs: Production value ($mn)

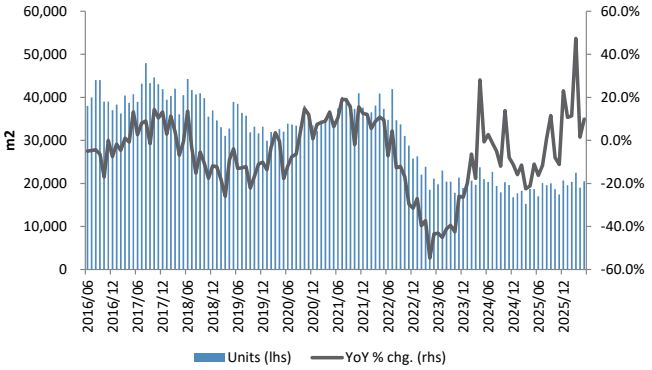


Source: METI, J.P. Morgan.

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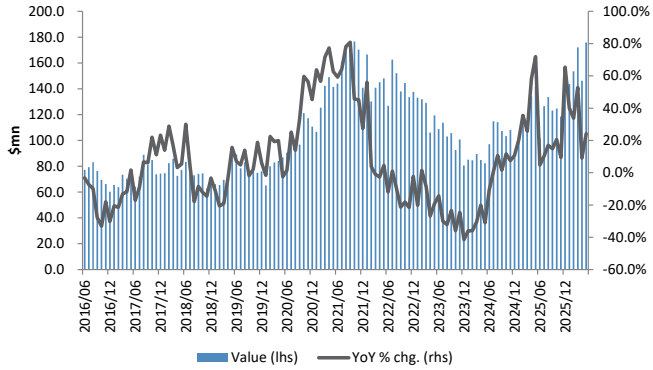
J.P.Morgan

Figure 28: Rigid module boards: Production quantity (square meters)



Source: METI, J.P. Morgan.

Figure 29: Rigid module boards: Production value ($mn)



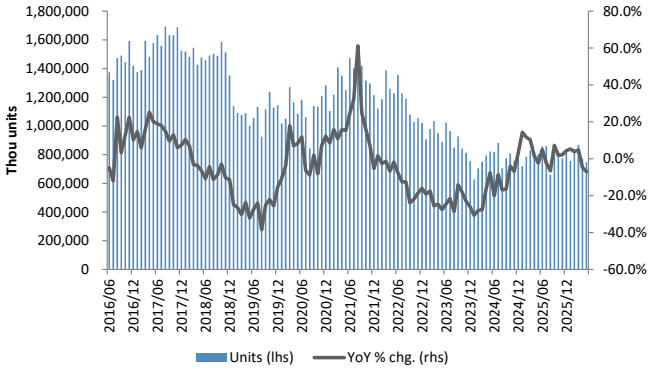
Source: METI, J.P. Morgan.

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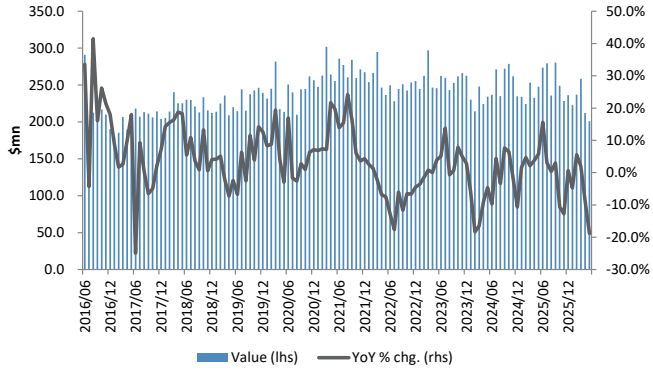
Semiconductors

Figure 30: Discrete semiconductors: Production quantity ('000 units)



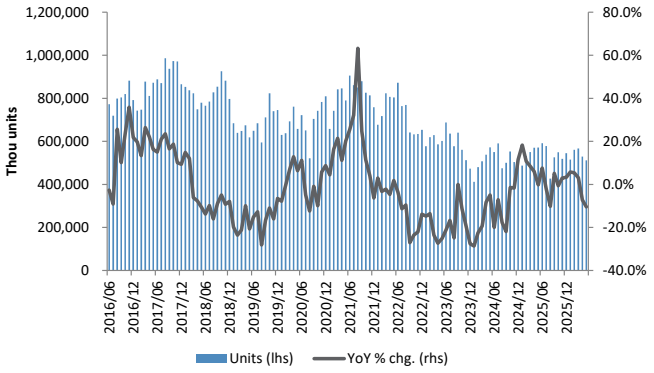
Source: METI, J.P. Morgan.

Figure 31: Discrete semiconductors: Production value ($mn)



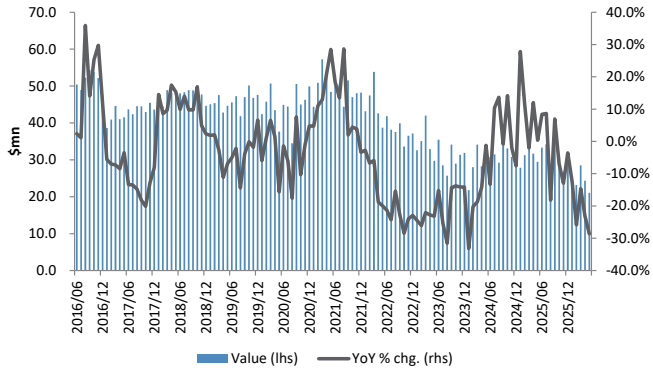
Source: METI, J.P. Morgan.

Figure 32: Diodes and rectifiers: Production quantity ('000 units)



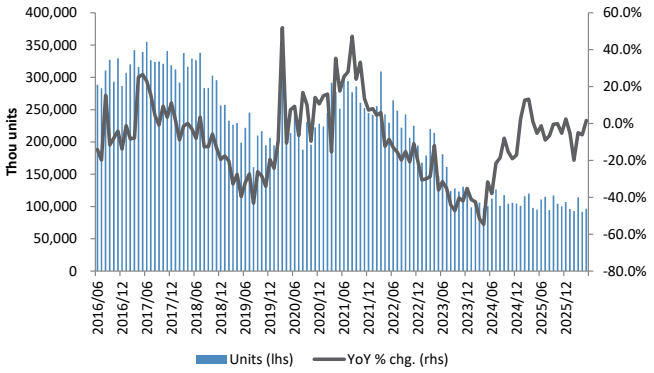
Source: METI, J.P. Morgan.

Figure 33: Diodes and rectifiers: Production value ($mn)



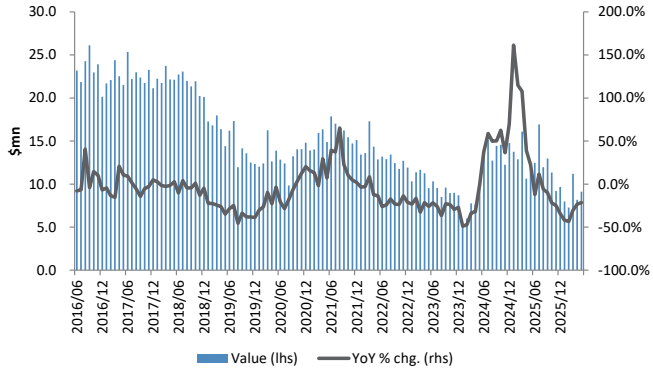
Source: METI, J.P. Morgan.

Figure 34: Si-Transistors: Production quantity ('000 units)



Source: METI, J.P. Morgan.

Figure 35: Si-Transistors: Production value ($mn)

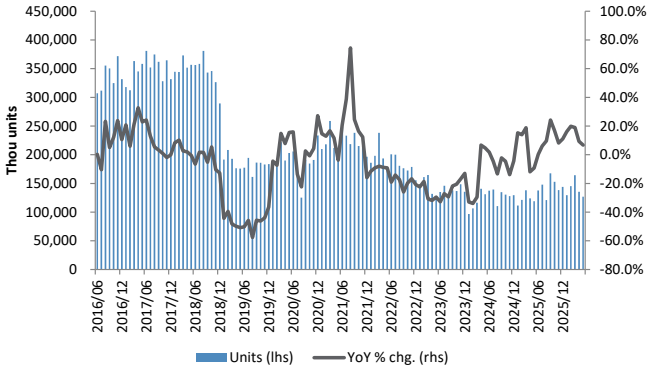


Source: METI, J.P. Morgan.

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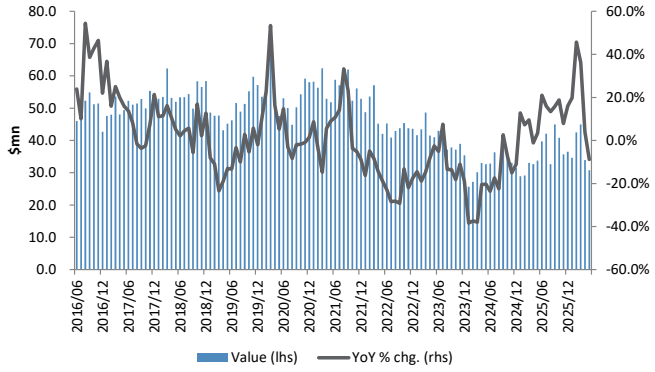
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Figure 36: Si-MOSFET: Production quantity ('000 units)



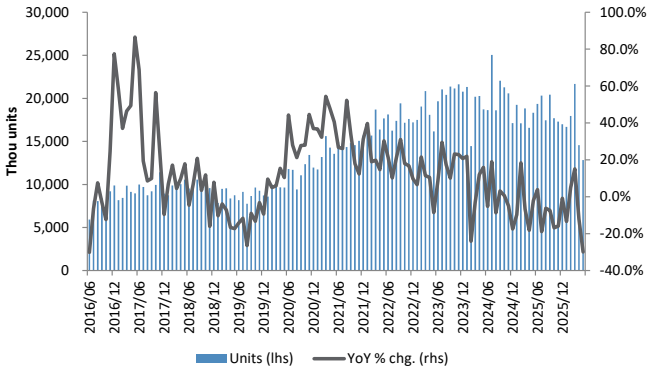
Source: METI, J.P. Morgan.

Figure 37: Si-MOSFET: Production value ($mn)



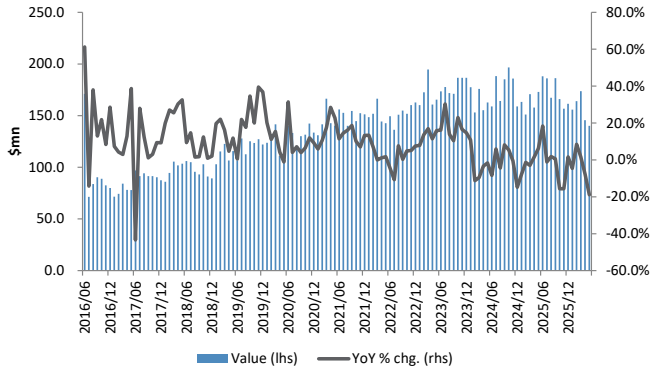
Source: METI, J.P. Morgan.

Figure 38: IGBTs: Production quantity ('000 units)



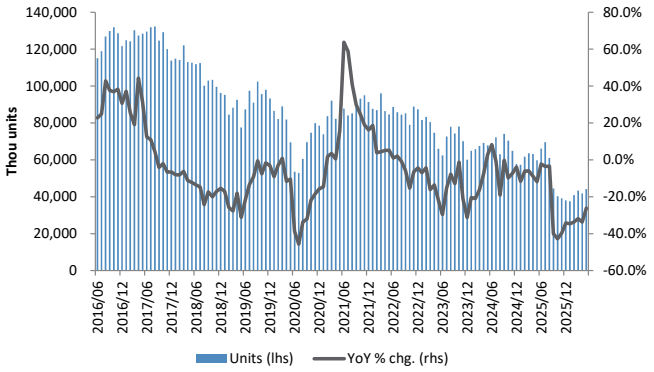
Source: METI, J.P. Morgan.

Figure 39: IGBTs: Production value ($mn)



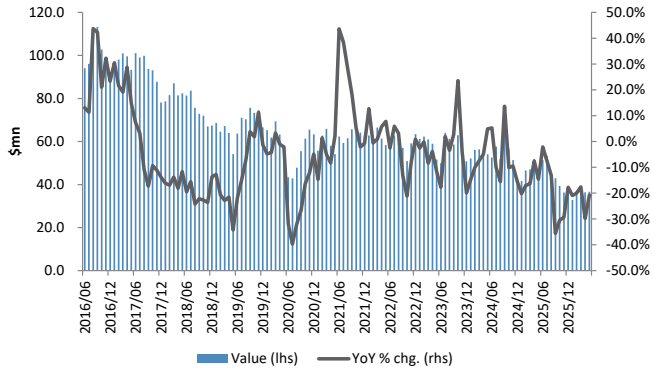
Source: METI, J.P. Morgan.

Figure 40: MCUs: Production quantity ('000 units)



Source: METI, J.P. Morgan.

Figure 41: MCUs: Production value ($mn)

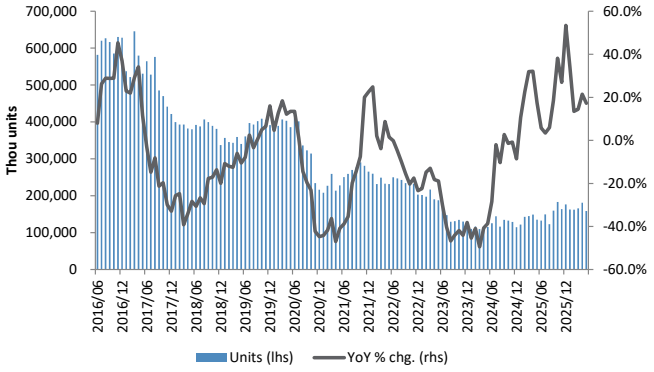


Source: METI, J.P. Morgan.

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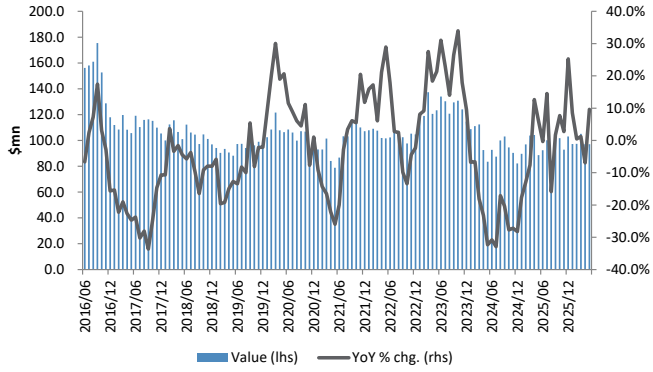
J.P.Morgan

Figure 42: Logic ICs: Production quantity ('000 units)



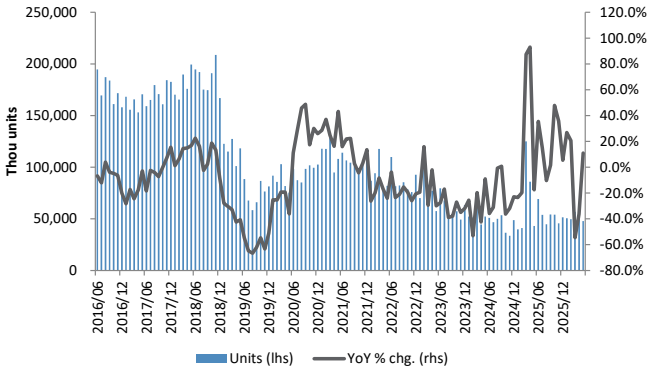
Source: METI, J.P. Morgan.

Figure 43: Logic ICs: Production value ($mn)



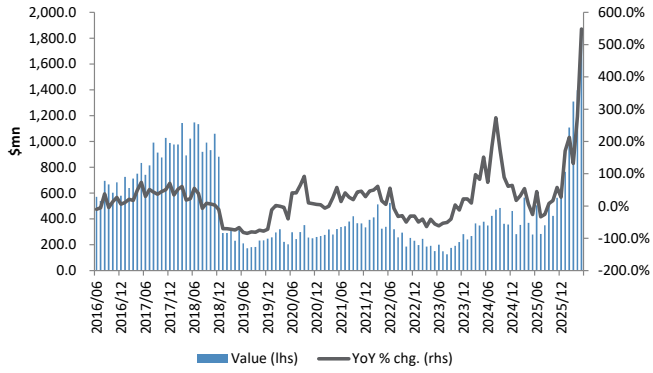
Source: METI, J.P. Morgan.

Figure 44: Memory: Production quantity ('000 units)



Source: METI, J.P. Morgan.

Figure 45: Memory: Production value ($mn)



Source: METI, J.P. Morgan.

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