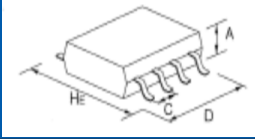
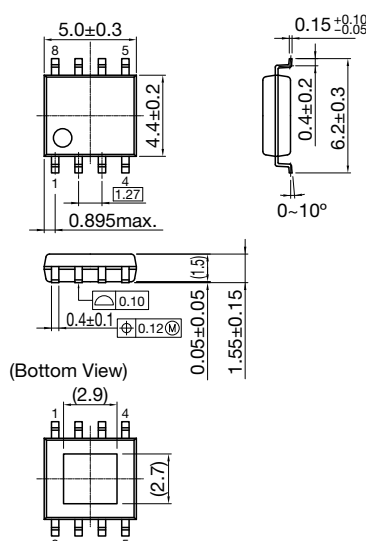
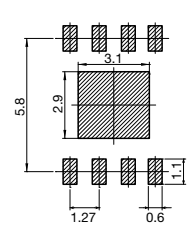
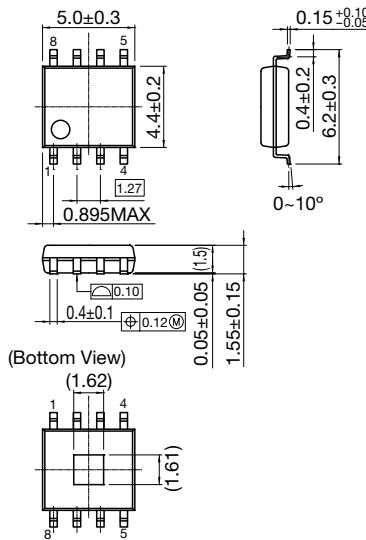
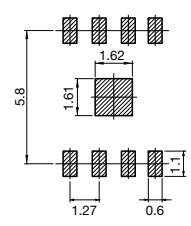


Package Line-up



Package Type	Pin Count	Package Name	Package Size (mm)			Pin Pitch (mm)	
			He	D	A	C	
Lead-through Type	3	TO-92A	5.40	3.80	7.50	2.50	
Flat Lead Type	6	SON-6A	3.00	1.60	0.80	0.50	
	6	SON-6B	3.00	1.60	0.80	0.50	
	6	SON-6C	2.00	1.60	0.55	0.50	
	6	SON-6D	3.00	2.90	0.80	0.95	
	5	SOT89-5A	4.25	4.50	1.50	1.50	
Gullwing Type	4	SC-82ABA	2.10	2.00	0.95	1.30	
	4	SC-82ABB	2.10	2.00	0.90	1.30	
	6	SC-88A	2.10	2.00	0.90	0.65	
	3	SOT-23A	2.80	2.90	1.15	1.90	
	5	SOT-25A	2.80	2.90	1.15	0.95	
	6	SOT-26A	2.80	2.90	1.15	0.95	
	6	SOT-26B	2.80	2.90	1.15	0.95	
	7	SOP-7B	6.20	5.00	1.55	1.27	
	8	SOP-8C	6.20	5.20	1.55	1.27	
	8	SOP-8D	6.20	5.00	1.55	1.27	
	10	SOP-10A	6.20	5.00	1.55	1.00	
	16	SOP-16B	6.20	10.20	1.55	1.27	
	28	SOP-28B	9.90	17.60	1.85	1.27	
	8	SSOP-8A	3.10	2.00	0.75	0.50	
	24	SSOP-24B	7.80	10.20	1.90	0.80	
	34	SSOP-34A	9.90	17.60	1.85	1.00	
	36	SSOP-36A	7.80	15.00	1.90	0.80	
	42	SSOP-42A	9.90	17.60	1.85	0.80	
	16	TSOP-16A	6.40	5.00	1.10	0.65	
	16	TSOP-16B	6.40	5.00	1.10	0.65	
	16	TSOP-16D	6.40	5.00	1.10	0.65	
	20	TSOP-20A	6.40	6.50	1.10	0.65	
	20	TSOP-20B	6.40	6.50	1.10	0.65	
	20	TSOP-20D	6.40	6.50	1.10	0.65	
	20	TSOP-20E	6.40	6.50	1.10	0.65	
	20	TSOP-20F	6.40	6.50	1.20	0.65	
	8	VSOP-8B	4.00	2.90	1.30	0.65	
	8	VSOP-8C	4.00	2.95	1.30	0.65	
	8	VSOP-8D	4.00	2.80	1.30	0.65	
	8	HSOP-8A	6.20	5.00	1.55	1.27	
	8	HSOP-8C	6.20	5.00	1.55	1.27	
	28	HSOP-28A	9.90	18.60	2.30	0.80	
	28	HSOP-28C	9.90	17.60	1.90	0.80	
	36	HSOP-36A	9.90	17.60	1.90	0.80	
	64	QFP-64E	16.00	16.00	1.20	0.80	
	80	QFP-80D	17.20	23.20	3.22	0.80	
	100	QFP-100A	17.20	23.20	3.22	0.65	
	3	TO-252C	9.90	6.60	2.30	2.30	
	5	TO-252-5A	9.90	6.60	2.30	1.27	
	Non-Lead Type	4	PLP-4A	1.00	1.00	0.60	0.65
4		PLP-4B	1.60	1.20	0.60	0.60	
6		PLP-6A	2.00	1.80	0.60	0.50	
10		PLP-10A	2.50	2.70	0.60	0.50	
16		SQFN-16A	3.00	3.00	0.75	0.50	
32		SQFN-32A	5.00	5.00	0.75	0.50	
4		SSON-4B	1.40	1.10	0.55	0.50	
6		SSON-6A	2.00	1.80	0.75	0.50	
6		SSON-6E	1.60	1.80	0.55	0.50	
6		SSON-6J	1.40	1.40	0.55	0.50	
6		SSON-6L	2.00	2.00	0.75	0.65	
8		SSON-8B	2.30	2.30	0.75	0.5	
8		SSON-8C	3.00	3.00	0.55	0.65	
10		SSON-10A	2.50	2.70	0.60	0.50	
20		WLCSP-20A	1.936	1.936	0.345	0.40	
25		WLCSP-25A	1.936	1.936	0.345	0.40	
48		WLCSP-48A	3.47	3.47	0.40	0.50	

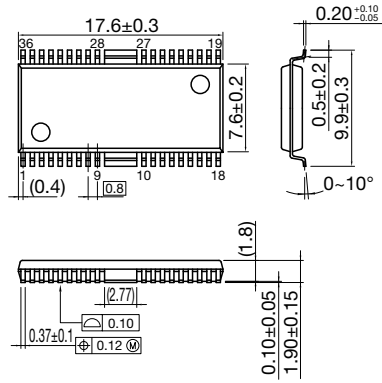
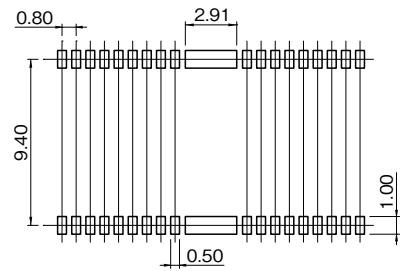
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>HSOP-8A</p>	 <p>Top View: 5.0 ± 0.3, 4.4 ± 0.2, 0.895max., 1.27, 0.4, $0.15 \pm 0.10 / -0.05$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Side View: $0.15 \pm 0.10 / -0.05$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Bottom View: 0.4 ± 0.1, $\phi 0.12$, 0.05 ± 0.05, 1.55 ± 0.15, 0.10, 0.05 ± 0.05, 1.55, (Bottom View) (2.9), (2.7)</p>	 <p>Dimensions: 5.8, 2.9, 3.1, 1.27, 0.6, 1.1</p>
<p>HSOP-8C</p>	 <p>Top View: 5.0 ± 0.3, 4.4 ± 0.2, 0.895MAX, 1.27, 0.4, $0.15 \pm 0.10 / -0.05$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Side View: $0.15 \pm 0.10 / -0.05$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Bottom View: 0.4 ± 0.1, $\phi 0.12$, 0.05 ± 0.05, 1.55 ± 0.15, 0.10, 0.05 ± 0.05, 1.55, (Bottom View) (1.62), (1.61)</p>	 <p>Dimensions: 5.8, 1.62, 1.61, 1.27, 0.6, 1.1</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>HSOP-28A</p>		
<p>HSOP-28C</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>HSOP-36A</p>	 <p>Top view dimensions: 17.6±0.3, 7.6±0.2, 0.4, 0.8, 1, 9, 10, 18, 27, 28, 36.</p> <p>Side view dimensions: 0.20^{+0.10}/_{-0.05}, 0.5±0.2, 9.9±0.3, 0-10°.</p> <p>Detail view dimensions: 1.8, 0.10±0.05, 1.90±0.15, 0.37±0.1, 0.10, 0.12, 2.77.</p>	 <p>Land pattern dimensions: 0.80, 2.91, 9.40, 1.00, 0.50.</p>

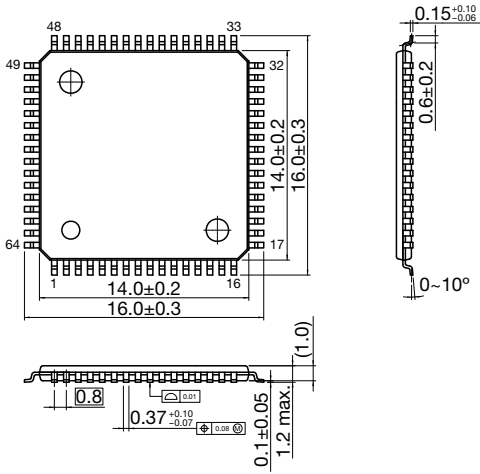
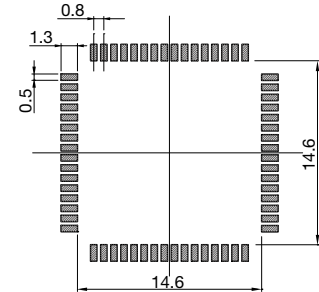
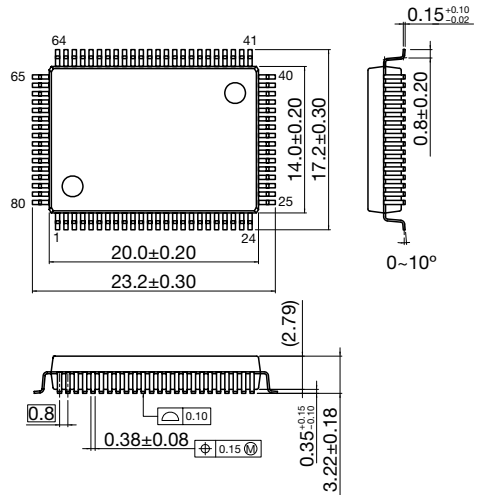
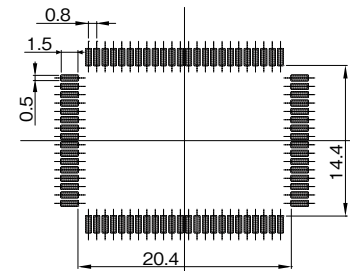
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>PLP-4A</p>	<p>Top View: 1.00±0.05 (width), 1.00±0.05 (height), pins 1, 2, 3, 4.</p> <p>Side View: 0.60MAX (height), 0.07MAX (thickness), 0.05 (lead height).</p> <p>Bottom View: 0.25±0.05 (width), 0.65 (width), 0.48±0.05 (width), 45° (angle), 0.32±0.05 (width), 0.07±0.05 (width), 0.25±0.05 (width), 0.05 (hole diameter).</p>	<p>Land Pattern: 0.44 (width), 0.25 (width), 0.18 (width), 0.25 (width), 0.65 (width), 0.55 (width), 0.57 (width), 1.46 (width).</p>
<p>PLP-4B</p>	<p>Top View: 1.20±0.05 (width), 1.60±0.05 (height), pins 1, 2, 3, 4.</p> <p>Side View: 0.6MAX (height), (0.07) (thickness), 0.05 (lead height).</p> <p>Bottom View: 0.60 (width), (1.0) (width), (0.7) (width), 0.20±0.05 (width), 0.30±0.05 (width), 0.05 (hole diameter).</p>	<p>Land Pattern: 0.45 (width), 0.60 (width), 0.70 (width), 1.00 (width), 2.10 (width), 0.30 (width).</p>

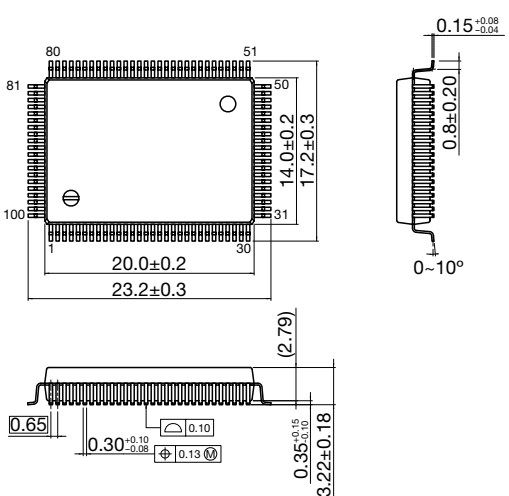
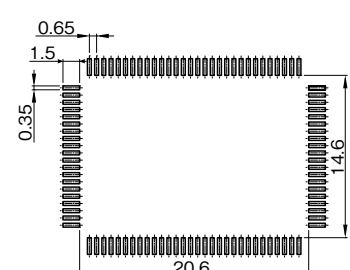
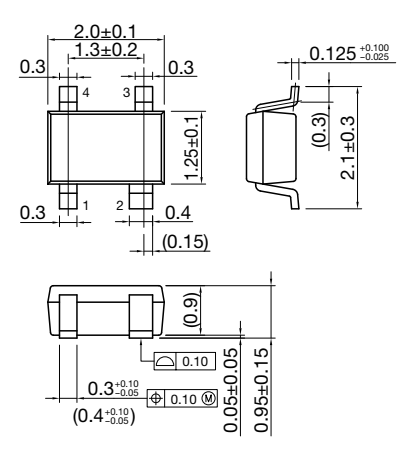
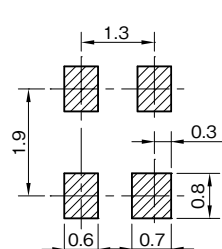
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>PLP-6A</p>	<p>1.80±0.05 2.00±0.05 0.6max. 0.30±0.05 (0.1) (1.6) (1.0) 0.25±0.05 0.20±0.05 0.05 0.05 0.05</p>	<p>0.50 1.60 1.00 1.95 2.40 0.45 0.35 0.25</p>
<p>PLP-10A</p>	<p>2.70±0.05 2.50±0.05 0.6max. 0.30±0.05 0.10±0.05 0.25±0.05 (2.30) 1.50 0.20±0.05 0.05 0.05 0.05 Ø0.50</p>	<p>0.50 2.30 1.50 2.40 2.90 0.35 0.25</p>

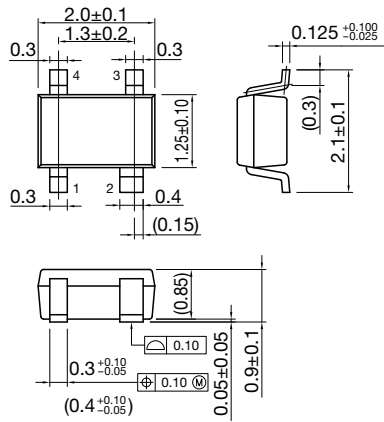
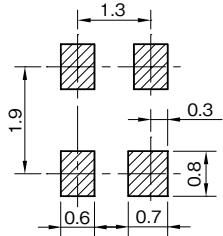
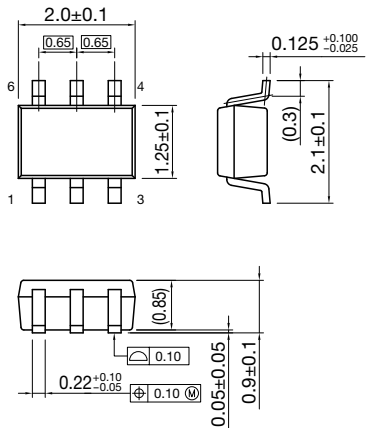
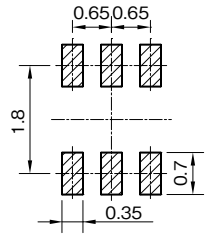
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>QFP-64E</p>	 <p>Top view dimensions: 14.0±0.2, 16.0±0.3, 14.0±0.2, 16.0±0.3. Pin 1 location: 0.8. Lead height: 0.1±0.05. Lead thickness: 0.37^{+0.10}/_{-0.07}. Lead width: 1.2 max. Lead angle: 0~10°.</p> <p>Side view dimensions: 0.15^{+0.10}/_{-0.06}, 0.6±0.2.</p> <p>Detail view dimensions: 0.8, 0.5, 1.3, 14.6.</p>	 <p>Land pattern dimensions: 0.8, 0.5, 1.3, 14.6.</p>
<p>QFP-80D</p>	 <p>Top view dimensions: 20.0±0.20, 23.2±0.30, 14.0±0.20, 17.2±0.30. Pin 1 location: 0.8. Lead height: 0.15±0.10. Lead thickness: 0.38±0.08. Lead width: 3.22±0.18. Lead angle: 0~10°.</p> <p>Side view dimensions: 0.15±0.10, 0.8±0.20.</p> <p>Detail view dimensions: 0.8, 0.5, 1.5, 14.4, 20.4.</p>	 <p>Land pattern dimensions: 0.8, 0.5, 1.5, 14.4, 20.4.</p>

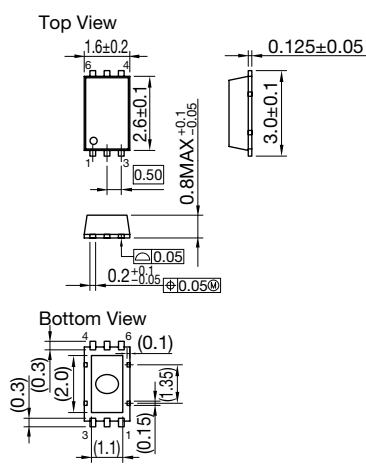
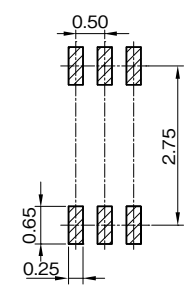
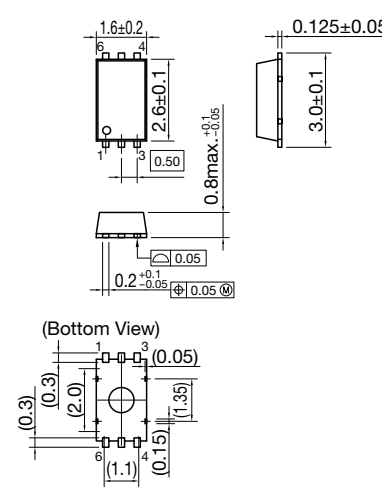
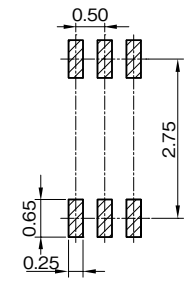
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>QFP-100A</p>	 <p>Top view dimensions: 20.0±0.2, 23.2±0.3, 14.0±0.2, 17.2±0.3, 0.65, 0.30^{+0.10/-0.08}, 0.10, 0.13, 0.35^{+0.15/-0.10}, 3.22±0.18, (2.79), 0.65, 0.10, 0.13, 0.35^{+0.15/-0.10}, 3.22±0.18.</p> <p>Side view dimensions: 0.15^{+0.08/-0.04}, 0.8±0.20, 0-10°.</p>	 <p>Land pattern dimensions: 0.65, 1.5, 0.35, 20.6, 14.6.</p>
<p>SC-82ABA</p>	 <p>Top view dimensions: 2.0±0.1, 1.3±0.2, 0.3, 0.3, 1.25±0.1, 0.3, 0.3, 0.4, (0.15), 0.9, 0.05±0.05, 0.95±0.15, 0.3^{+0.10/-0.05}, (0.4^{+0.10/-0.05}), 0.10, 0.10.</p> <p>Side view dimensions: 0.125^{+0.100/-0.025}, (0.3), 2.1±0.3.</p>	 <p>Land pattern dimensions: 1.3, 1.9, 0.3, 0.8, 0.6, 0.7.</p>

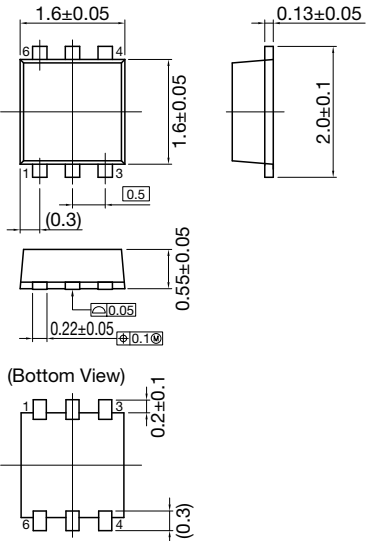
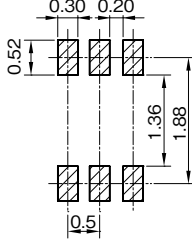
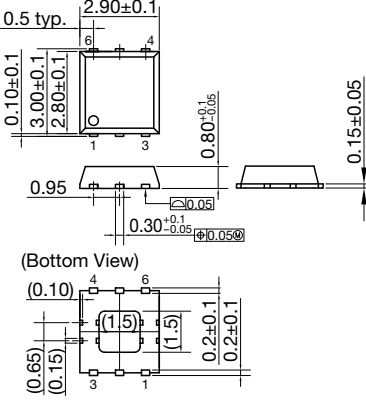
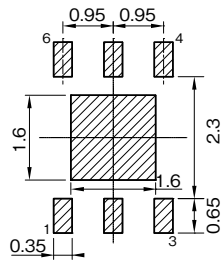
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SC-82ABB</p>	 <p>Top view dimensions: 2.0±0.1, 1.3±0.2, 0.3, 0.3, 0.3, 0.3, 1.25±0.10, 0.4, (0.15), 0.3, 1, 2, 3, 4.</p> <p>Side view dimensions: 0.125^{+0.100}/_{-0.025}, (0.3), 2.1±0.1.</p> <p>Bottom view dimensions: (0.85), 0.3^{+0.10}/_{-0.05}, (0.4^{+0.10}/_{-0.05}), 0.10, 0.10, 0.05±0.05, 0.9±0.1.</p>	 <p>Land pattern dimensions: 1.3, 1.9, 0.3, 0.8, 0.6, 0.7.</p>
<p>SC-88A</p>	 <p>Top view dimensions: 2.0±0.1, (0.65), (0.65), 6, 4, 1.25±0.1, 1, 3.</p> <p>Side view dimensions: 0.125^{+0.100}/_{-0.025}, (0.3), 2.1±0.1.</p> <p>Bottom view dimensions: (0.85), 0.22^{+0.10}/_{-0.05}, (0.10), 0.10, 0.05±0.05, 0.9±0.1.</p>	 <p>Land pattern dimensions: 0.65, 0.65, 1.8, 0.7, 0.35.</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p style="text-align: center;">SON-6A</p>	 <p>Top View</p> <p>Bottom View</p>	
<p style="text-align: center;">SON-6B</p>	 <p>Top View</p> <p>(Bottom View)</p>	

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p style="text-align: center;">SON-6C</p>	 <p>Top View: 1.6 ± 0.05 (width), 1.6 ± 0.05 (height), 0.5 (pitch), (0.3) (lead width), 0.13 ± 0.05 (lead height), 2.0 ± 0.1 (total height).</p> <p>Side View: 0.55 ± 0.05 (height), 0.22 ± 0.05 (lead thickness), $\phi 0.10$ (lead diameter).</p> <p>Bottom View: 0.2 ± 0.1 (lead width), (0.3) (pitch).</p>	 <p>Land Pattern Dimensions: 0.30 (pad width), 0.20 (pad width), 0.52 (pitch), 1.36 (total width), 1.88 (total width), 0.5 (pitch).</p>
<p style="text-align: center;">SON-6D</p>	 <p>Top View: 0.5 typ. (lead height), 2.90 ± 0.1 (width), 0.10 ± 0.1 (lead width), 3.00 ± 0.1 (pitch), 2.80 ± 0.1 (pitch), 0.80 (pitch), 0.15 ± 0.05 (lead height).</p> <p>Side View: 0.95 (height), 0.30 (lead thickness), $\phi 0.05$ (lead diameter).</p> <p>Bottom View: (0.10) (pitch), (0.65) (pitch), (0.15) (pitch), (1.5) (pitch), (1.5) (pitch), 0.2 ± 0.1 (lead width), 0.2 ± 0.1 (lead width).</p>	 <p>Land Pattern Dimensions: 0.95 (pad width), 0.95 (pad width), 1.6 (total width), 2.3 (total width), 0.65 (total width), 0.35 (pitch), 1.6 (pitch), 0.65 (pitch).</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p style="text-align: center;">SOP-7B</p>		
<p style="text-align: center;">SOP-8C</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOP-8D</p>		
<p>SOP-10A</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOP-16B</p>		
<p>SOP-28B</p>		

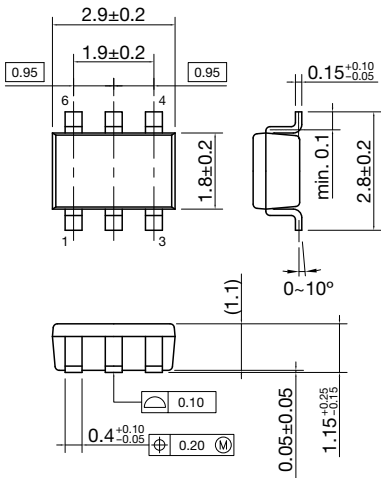
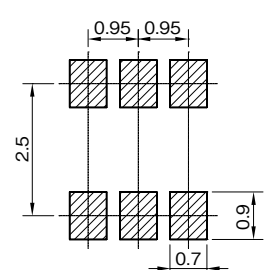
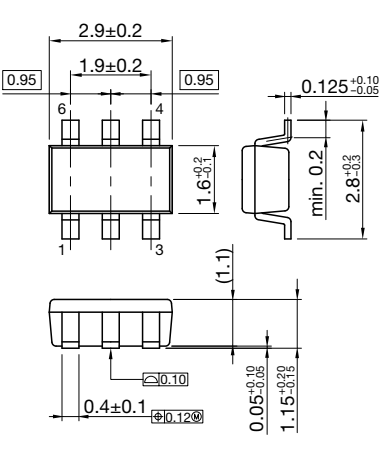
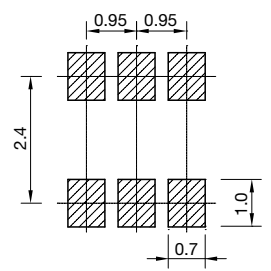
for package

Package

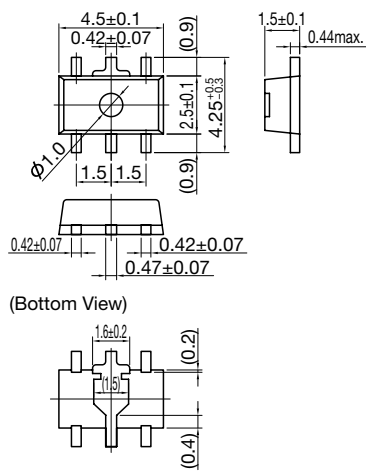
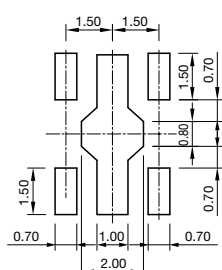
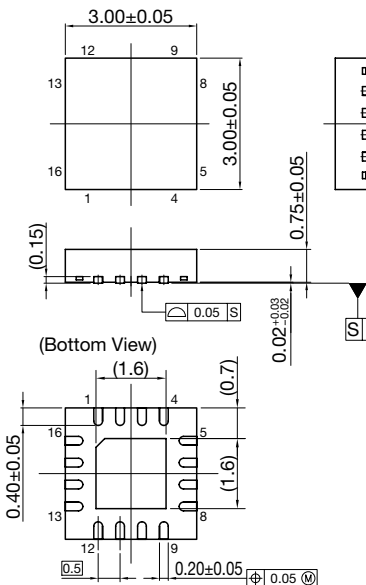
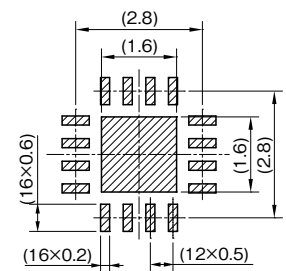
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOT-23A</p>	<p>Top view dimensions: 2.9±0.2, 1.9, 0.95, 0.95, 1.6±0.2. Pin 1, 2, 3. Lead thickness: 0.15±0.10. Lead length: min. 0.2. Overall length: 2.8±0.2. Spacing: (1.1). Bottom view dimensions: 0.4±0.10, 0.05±0.10, 1.15±0.25.</p>	<p>Land pattern dimensions: Pad width 0.7, pad height 1.0, pad spacing 2.4, pad offset 0.95.</p>
<p>SOT-25A</p>	<p>Top view dimensions: 2.9±0.2, 1.9±0.2, 0.95, 0.95, 1.6±0.2. Pin 1, 3, 4, 5. Lead thickness: 0.15±0.10. Lead length: min. 0.2. Overall length: 2.8±0.2. Spacing: (1.1). Bottom view dimensions: 0.4±0.10, 0.05±0.05, 1.15±0.25.</p>	<p>Land pattern dimensions: Pad width 0.7, pad height 1.0, pad spacing 2.4, pad offset 0.95.</p>

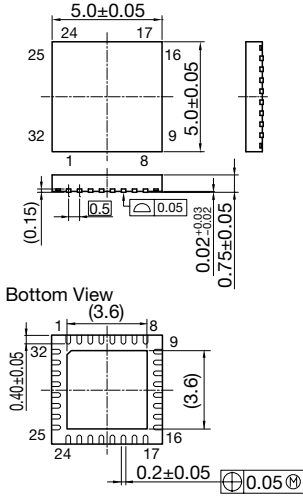
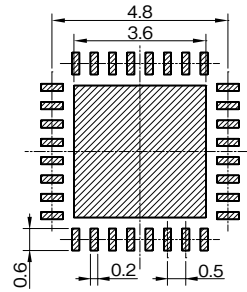
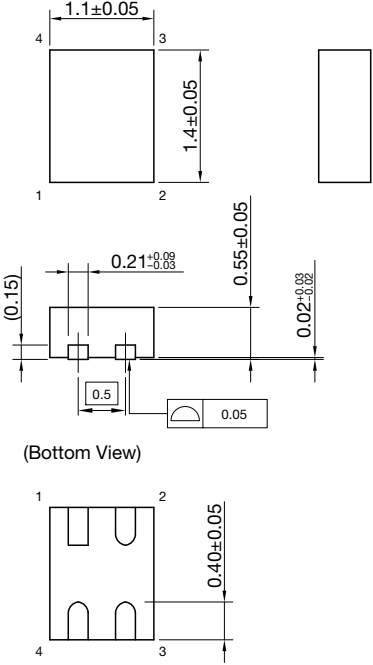
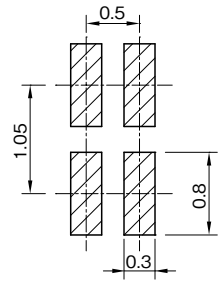
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOT-26A</p>		
<p>SOT-26B</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOT89-5A</p>	 <p>Top View: 4.5 ± 0.1, 0.42 ± 0.07 (0.9), 2.5 ± 0.1, $4.25^{+0.3}_{-0.3}$, $\phi 1.0$, 1.5, 1.5 (0.9)</p> <p>Side View: 1.5 ± 0.1, 0.44max.</p> <p>Bottom View: 0.42 ± 0.07, 0.42 ± 0.07, 0.47 ± 0.07</p> <p>(Bottom View): 1.6 ± 0.2 (0.2), 0.4</p>	 <p>Dimensions: 1.50, 1.50, 1.50, 0.70, 0.80, 0.70, 1.00, 2.00, 0.70</p>
<p>SQFN-16A</p>	 <p>Top View: 3.00 ± 0.05, 12, 9, 13, 8, 3.00 ± 0.05, 16, 5, 1, 4</p> <p>Side View: 0.15, 0.75 ± 0.05, 0.05 S, $0.02^{+0.02}_{-0.02}$, S</p> <p>(Bottom View): 0.40 ± 0.05, 16, 13, 12, 9, 8, 5, 4, 1, 1.6 (0.7), 1.6, 0.20 ± 0.05, $\phi 0.05$ (M)</p>	 <p>Dimensions: (2.8), (1.6), (16×0.6), (16×0.2), (12×0.5), (1.6), (2.8)</p>

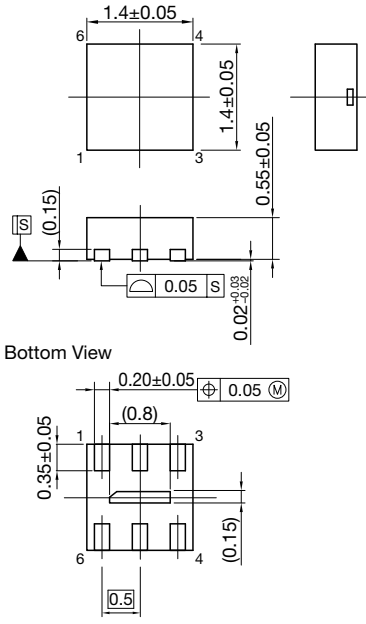
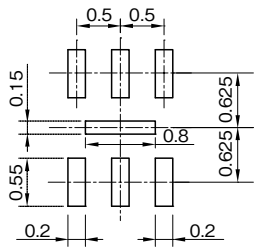
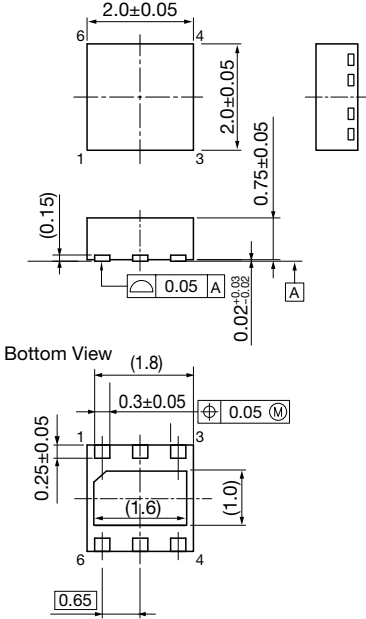
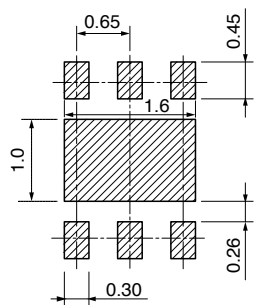
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SQFN-32A</p>	 <p>Top View: 5.0±0.05, 24, 17, 25, 16, 32, 9, 5.0±0.05, 1, 8</p> <p>Side View: (0.15), 0.5, 0.05, 0.02±0.03, 0.75±0.05</p> <p>Bottom View: (3.6), 1, 8, 9, 0.40±0.05, 32, 25, 24, 17, 16, 0.2±0.05, 0.05</p>	 <p>4.8, 3.6, 0.6, 0.2, 0.5</p>
<p>SSON-4B</p>	 <p>Top View: 1.1±0.05, 4, 3, 1, 2, 1.4±0.05</p> <p>Side View: (0.15), 0.21±0.03, 0.55±0.05, 0.02±0.03, 0.5, 0.05</p> <p>(Bottom View): 1, 2, 4, 3, 0.40±0.05</p>	 <p>0.5, 1.05, 0.8, 0.3</p>

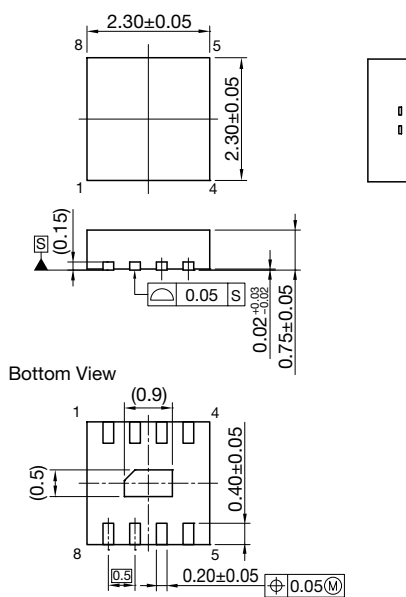
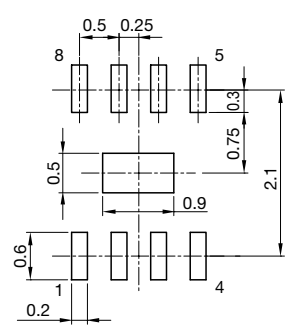
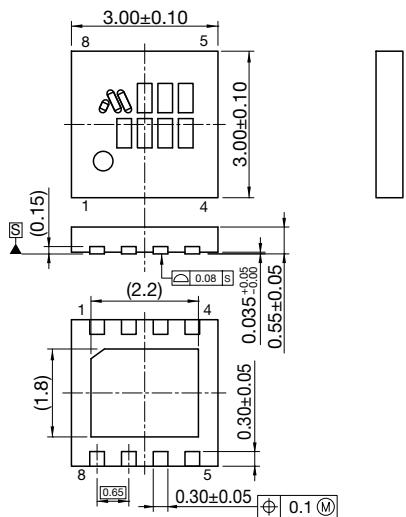
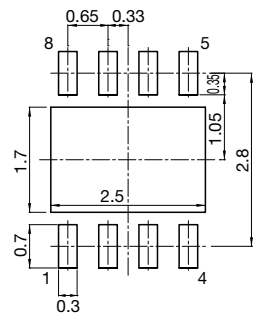
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-6A</p>	<p>1.80±0.05</p> <p>2.00±0.05</p> <p>0.75±0.05</p> <p>(Bottom View)</p> <p>0.30±0.05</p> <p>0.05±0.05</p> <p>0.20±0.05</p> <p>0.30±0.05</p> <p>0.05</p>	<p>0.5</p> <p>0.5</p> <p>0.8</p> <p>1.2</p> <p>0.3</p> <p>0.2</p> <p>0.5</p> <p>0.7</p> <p>0.7</p> <p>0.5</p>
<p>SSON-6E</p>	<p>1.80±0.05</p> <p>1.60±0.05</p> <p>0.55±0.05</p> <p>(Bottom View)</p> <p>0.30±0.05</p> <p>0.25±0.05</p> <p>0.20±0.05</p> <p>0.05±0.05</p> <p>0.05</p>	<p>0.5</p> <p>0.5</p> <p>1.2</p> <p>0.3</p> <p>0.2</p> <p>0.45</p> <p>0.55</p> <p>0.45</p> <p>0.5</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-6J</p>	 <p>Top View: 1.4±0.05 (width), 1.4±0.05 (height), pins 1, 3, 4, 6.</p> <p>Side View: 0.55±0.05 (height), 0.02^{+0.02}_{-0.02} (lead thickness), 0.05 (lead width), 0.15 (lead height).</p> <p>Bottom View: 0.20±0.05 (pin pitch), 0.05 (pin diameter), 0.35±0.05 (lead length), 0.8 (lead width), 0.15 (lead height), 0.5 (lead thickness).</p>	 <p>Land Pattern: 0.5 (pad width), 0.5 (pad width), 0.15 (pad height), 0.8 (lead width), 0.625 (lead length), 0.55 (lead length), 0.2 (lead offset).</p>
<p>SSON-6L</p>	 <p>Top View: 2.0±0.05 (width), 2.0±0.05 (height), pins 1, 3, 4, 6.</p> <p>Side View: 0.75±0.05 (height), 0.02^{+0.02}_{-0.02} (lead thickness), 0.05 (lead width), 0.15 (lead height), A (lead angle).</p> <p>Bottom View: 1.8 (width), 0.3±0.05 (pin pitch), 0.05 (pin diameter), 0.25±0.05 (lead length), 1.6 (lead width), 1.0 (lead length), 0.65 (lead thickness).</p>	 <p>Land Pattern: 0.65 (pad width), 0.45 (pad height), 1.6 (lead width), 1.0 (lead length), 0.30 (lead offset), 0.26 (lead offset).</p>

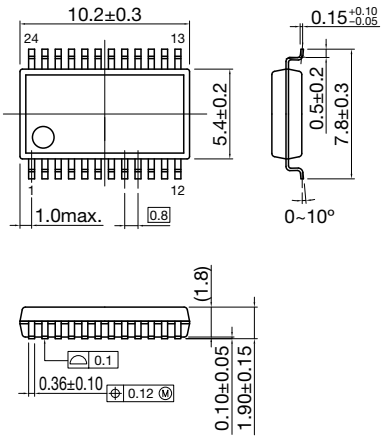
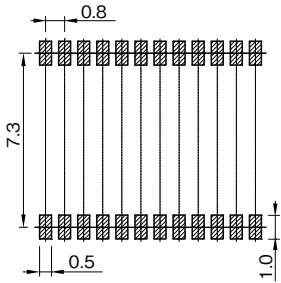
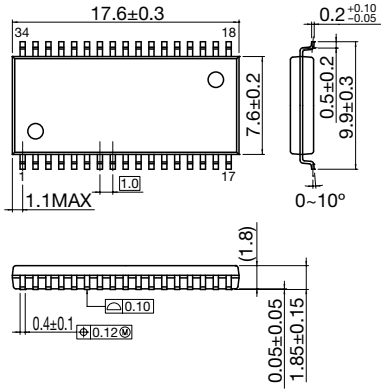
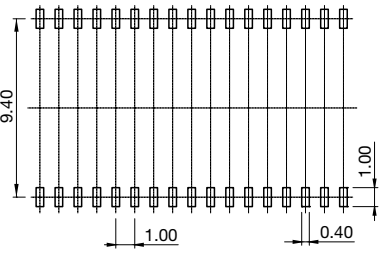
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-8B</p>	 <p>Top View: Overall width 2.30±0.05, pin pitch 0.5, pin width 0.25, pin offset 0.02±0.002, pin height 0.75±0.05. Pin positions 1, 4, 5, 8.</p> <p>Side View: Package height 0.15, lead height 0.05, lead thickness 0.02±0.002, lead length 0.75±0.05.</p> <p>Bottom View: Pin pitch 0.9, pin width 0.40±0.05, pin offset 0.5, pin height 0.20±0.05, pin diameter 0.05. Pin positions 1, 4, 5, 8.</p>	 <p>Pin pitch 0.5, pin width 0.25, pin offset 0.3, pin height 0.75. Pad width 0.5, pad length 0.9, pad offset 0.6, pad height 0.2. Pin positions 1, 4, 5, 8. Overall pad width 2.1.</p>
<p>SSON-8C</p>	 <p>Top View: Overall width 3.00±0.10, pin pitch 0.5, pin width 0.33, pin offset 0.08, pin height 0.55±0.05. Pin positions 1, 4, 5, 8.</p> <p>Side View: Package height 0.15, lead height 0.08, lead thickness 0.035±0.005, lead length 0.55±0.05.</p> <p>Bottom View: Pin pitch 2.2, pin width 0.30±0.05, pin offset 1.8, pin height 0.30±0.05, pin diameter 0.1. Pin positions 1, 4, 5, 8.</p>	 <p>Pin pitch 0.65, pin width 0.33, pin offset 0.3, pin height 1.05. Pad width 1.7, pad length 2.5, pad offset 0.7, pad height 0.3. Pin positions 1, 4, 5, 8. Overall pad width 2.8.</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-10A</p>	<p>Top View: Overall width 2.7, pin pitch 0.5, pin width 0.15, pin length 0.55, pin diameter $\phi 0.02$. Pin 1 is marked with a circle.</p> <p>Side View: Package height 1.50, lead height 0.45, lead thickness 0.10, lead width 0.20.</p> <p>Bottom View: Pin pitch 0.5, pin width 0.3, pin length 0.1, pin diameter $\phi 0.05$. Pin 1 is marked with a circle.</p>	<p>Land Pattern: Pin pitch 0.50, pad width 0.10, pad length 0.30, pad diameter $\phi 0.20$. Overall width 2.30, overall length 2.90.</p>
<p>SSOP-8A</p>	<p>Top View: Overall width 2.0 ± 0.3, pin pitch 0.5, pin length 0.5, pin diameter $\phi 0.1$. Pin 1 is marked with a circle.</p> <p>Side View: Package height 3.1 ± 0.3, lead height 0.13, lead thickness MIN 0.1, lead width 0.75, lead angle $0-10^\circ$.</p> <p>Bottom View: Pin pitch 0.5, pin width 0.2, pin length 0.1, pin diameter $\phi 0.1$. Pin 1 is marked with a circle.</p>	<p>Land Pattern: Pin pitch 0.50, pad width 0.25, pad length 0.55, pad diameter $\phi 0.25$. Overall width 3.05.</p>

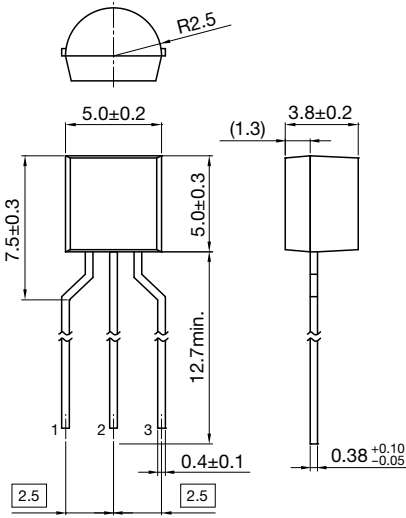
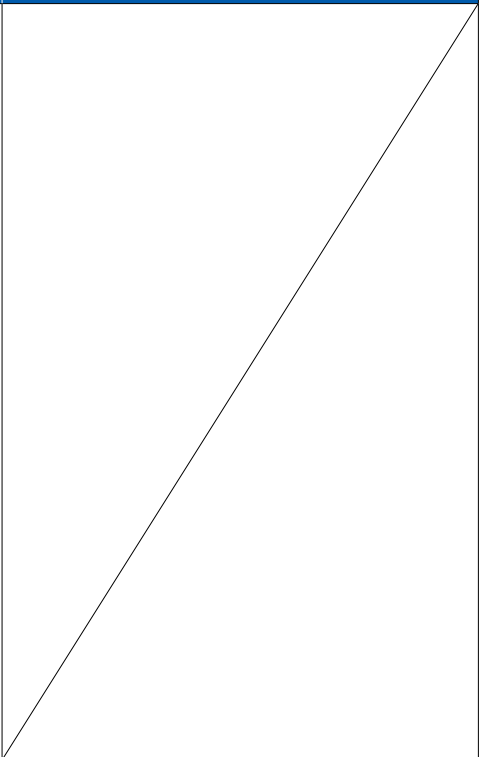
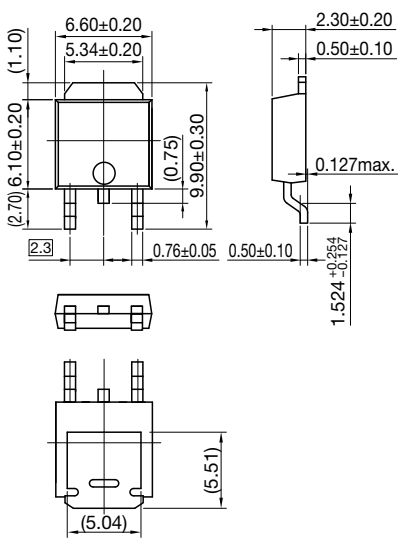
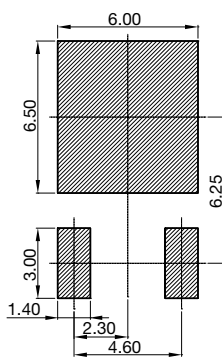
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSOP-24B</p>		
<p>SSOP-34A</p>		

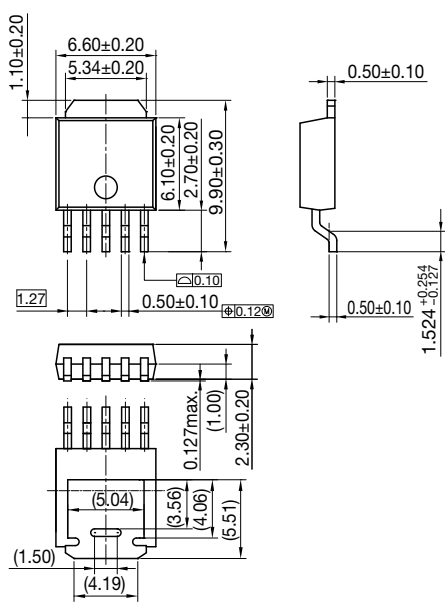
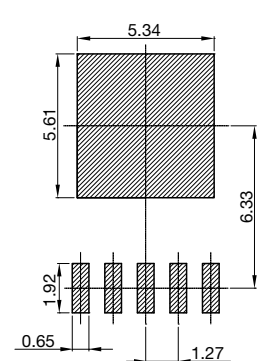
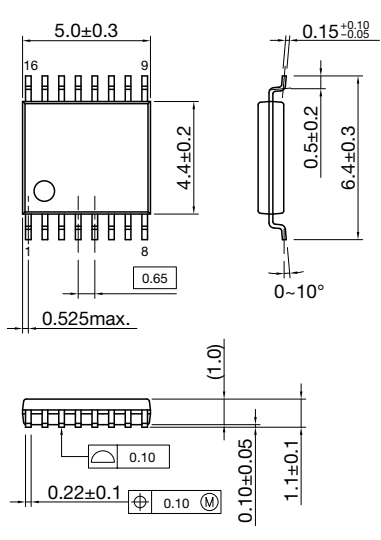
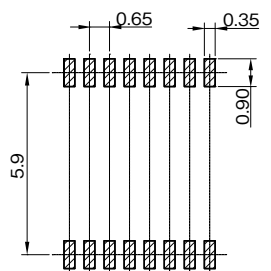
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSOP-36A</p>		
<p>SSOP-42A</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TO-92A</p>	 <p>Dimensional drawing of TO-92A package showing top, side, and detail views. Dimensions include: top diameter 5.0±0.2, height 7.5±0.3, lead length 12.7 min., lead diameter 0.4±0.1, and lead thickness 0.38 (+0.10/-0.05).</p>	 <p>Recommended land pattern for TO-92A package, showing a square pad with a diameter of 6.00 mm.</p>
<p>TO-252C</p>	 <p>Dimensional drawing of TO-252C package showing top, side, and detail views. Dimensions include: top diameter 6.60±0.20, lead diameter 0.76±0.05, lead length 1.524 (+0.254/-0.127), and lead thickness 0.127 max.</p>	 <p>Recommended land pattern for TO-252C package, showing a square pad with a diameter of 6.00 mm and a lead diameter of 2.30 mm.</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TO-252-5A</p>	 <p>Top view dimensions: 6.60 ± 0.20, 5.34 ± 0.20, 6.10 ± 0.20, 2.70 ± 0.20, 9.90 ± 0.30, 1.10 ± 0.20, 0.50 ± 0.10, 1.27, 0.50 ± 0.10, $\phi 0.12 \text{ (M)}$.</p> <p>Side view dimensions: 0.50 ± 0.10, $1.524^{+0.254}_{-0.127}$, 0.50 ± 0.10.</p> <p>Bottom view dimensions: 2.30 ± 0.20, 1.00, 0.127 max., (6.04), (3.56), (4.06), (5.51), (1.50), (4.19).</p>	 <p>Land pattern dimensions: 5.34, 5.61, 6.33, 1.92, 0.65, 1.27.</p>
<p>TSOP-16A</p>	 <p>Top view dimensions: 5.0 ± 0.3, 4.4 ± 0.2, 16, 9, 0.65, 0.525 max..</p> <p>Side view dimensions: $0.15^{+0.10}_{-0.05}$, 0.5 ± 0.2, 6.4 ± 0.3, $0 \sim 10^\circ$.</p> <p>Bottom view dimensions: (1.0), 0.10, 0.22 ± 0.1, $\phi 0.10 \text{ (M)}$, 0.10 ± 0.05, 1.1 ± 0.1.</p>	 <p>Land pattern dimensions: 0.65, 0.35, 5.9, 0.90.</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TSOP-16B</p>		
<p>TSOP-16D</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TSOP-20A</p>		
<p>TSOP-20B</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TSOP-20D</p>		
<p>TSOP-20E</p>		

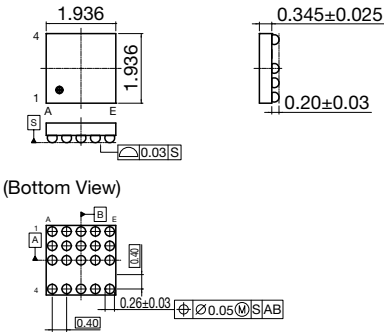
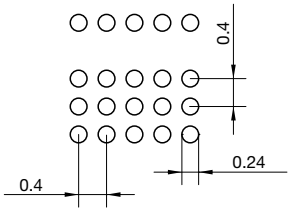
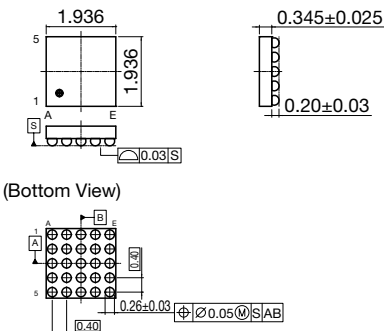
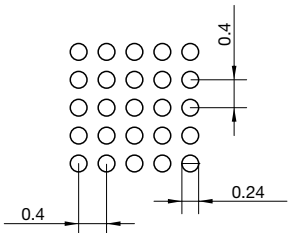
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>TSOP-20F</p>	<p>Top View: 6.5±0.3, 4.4±0.2, 0.65, 11, 20, 10</p> <p>Side View: 0.127±0.008, 0.6±0.1, 6.4±0.3, 0-8°</p> <p>Bottom View: 0.24±0.05, 0.1±0.05, 1.20MAX, 1.0, 0.10, 0.10, 1, 10, 20, 11, 3.99, 2.80</p>	<p>Dimensions: 7.72, 5.94, 3.00, 4.16, 1.78, 0.65, 0.40, 3.19</p>
<p>VSOP-8B</p>	<p>Top View: 2.9±0.1, 2.8±0.2, 0.65, 8, 5, 4, 1</p> <p>Side View: 0.125^{+0.10}/_{-0.05}, 0.45±0.20, 4.0±0.3, 0-10°</p> <p>Bottom View: 0.2±0.1, 0.10±0.05, 1.1, 1.3max, 0.10, 0.12, 1</p>	<p>Dimensions: 0.65, 3.55, 0.95, 0.35</p>

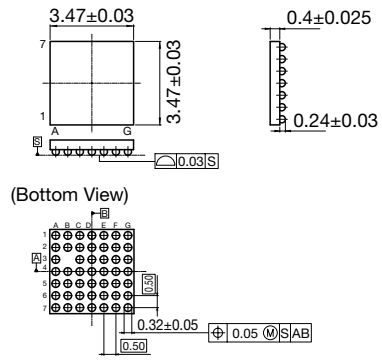
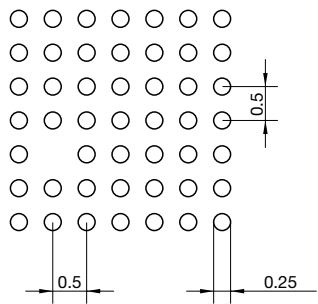
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>VSOP-8C</p>		
<p>VSOP-8D</p>		

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>WLCSP-20A</p>	 <p>(Bottom View)</p>	
<p>WLCSP-25A</p>	 <p>(Bottom View)</p>	

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>WLCSP-48A</p>	 <p>Top View Dimensions: 3.47 ± 0.03 (width) 3.47 ± 0.03 (height) 0.4 ± 0.025 (pitch) 0.24 ± 0.03 (lead length) 0.03 (lead thickness)</p> <p>(Bottom View) 0.32 ± 0.05 (pitch) 0.50 (width) 0.05 (lead length) 0.50 (width)</p>	 <p>Land Pattern Dimensions: 0.5 (pitch) 0.25 (width)</p>