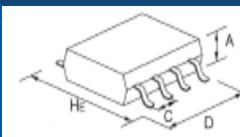
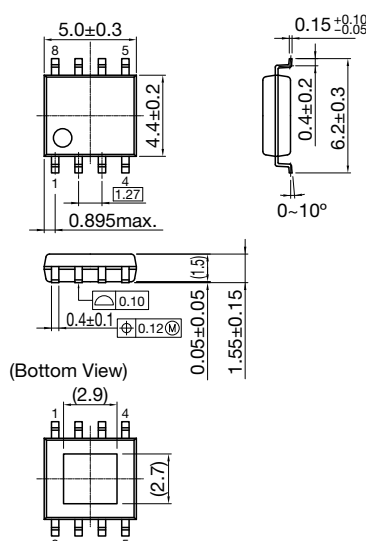
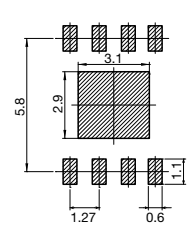
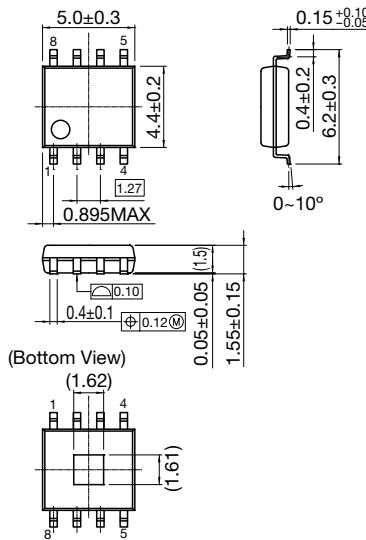
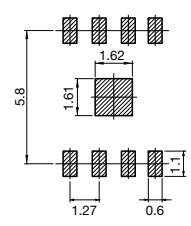


Package Line-up

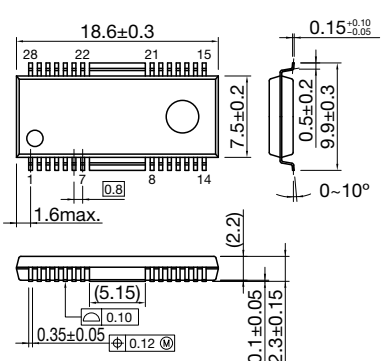
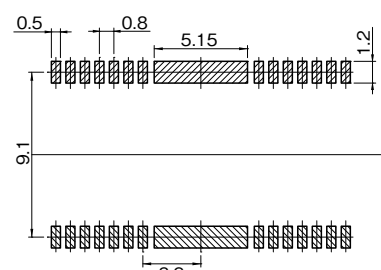
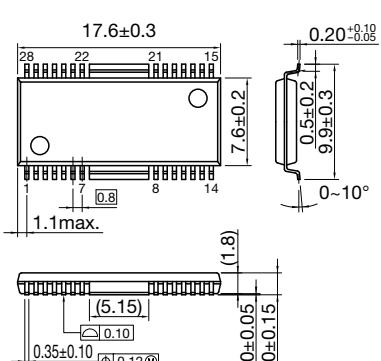
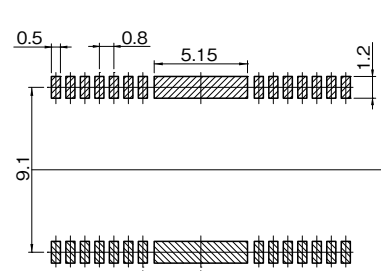


Package Type	Pin Count	Package Name	Package Size (mm)			Pin Pitch (mm)	
			He	D	A	C	
Lead-through Type	3	TO-92A	5.40	3.80	7.50	2.50	
Flat Lead Type	6	SON-6A	3.00	1.60	0.80	0.50	
	6	SON-6B	3.00	1.60	0.80	0.50	
	6	SON-6C	2.00	1.60	0.55	0.50	
	6	SON-6D	3.00	2.90	0.80	0.95	
	5	SOT89-5A	4.25	4.50	1.50	1.50	
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	

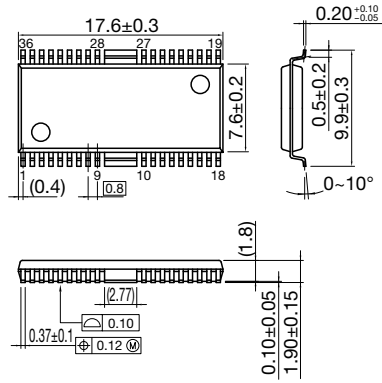
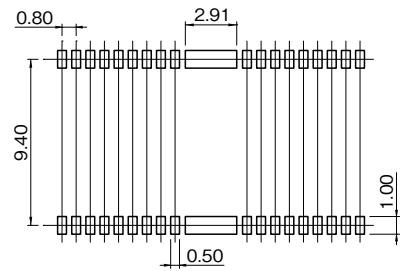
Package

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, $0.15^{+0.10}_{-0.05}$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Side View: $0.15^{+0.10}_{-0.05}$, 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, 1.5, 2.9, 2.7</p>	 <p>Land Pattern 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, $0.15^{+0.10}_{-0.05}$, 0.4 ± 0.2, 6.2 ± 0.3, $0 \sim 10^\circ$</p> <p>Side View: $0.15^{+0.10}_{-0.05}$, 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, 1.5, 1.62, 1.61</p>	 <p>Land Pattern 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>

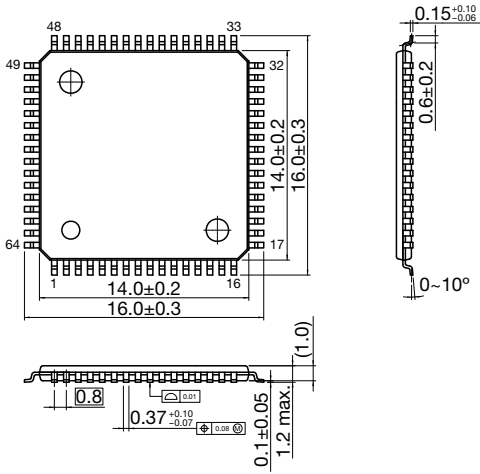
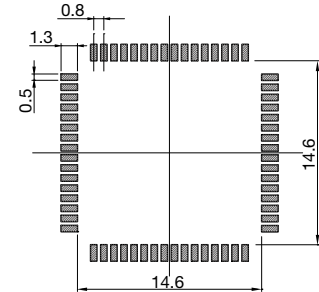
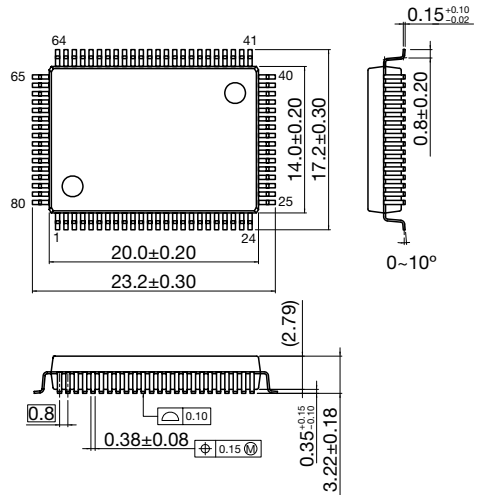
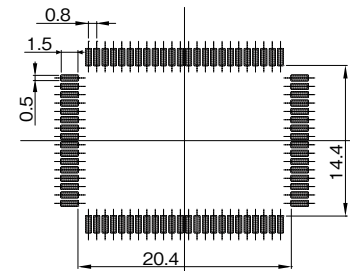
Package

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), 0.32 (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), 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>

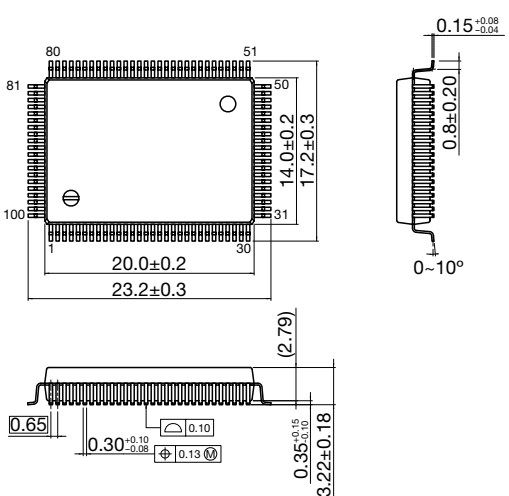
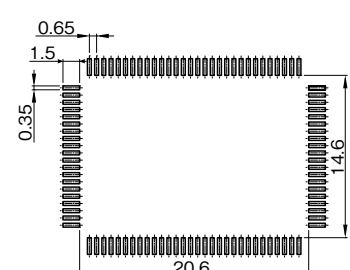
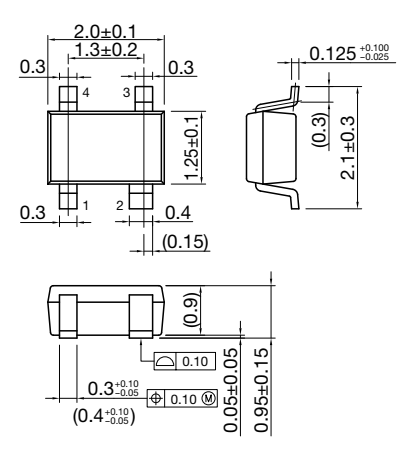
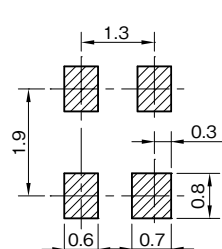
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>PLP-6A</p>		
<p>PLP-10A</p>		

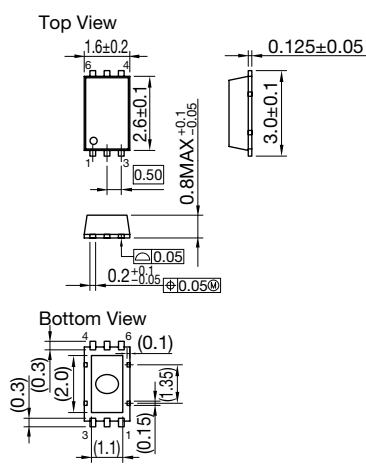
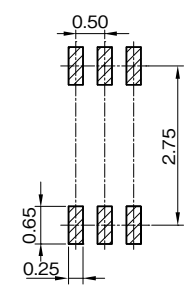
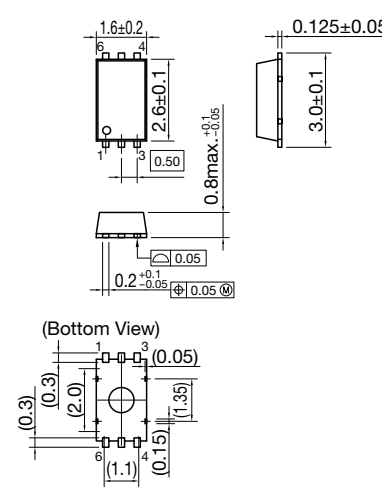
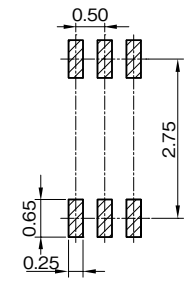
Package

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. Pin 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, 1.0.</p>	 <p>Land pattern dimensions: 14.6, 14.6, 0.8, 1.3, 0.5.</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. Pin height: 0.1±0.05. Lead thickness: 0.38±0.08. Lead width: 0.35^{+0.15}/_{-0.10}. Lead angle: 0~10°.</p> <p>Side view dimensions: 0.15^{+0.10}/_{-0.02}, 0.8±0.20, 2.79.</p>	 <p>Land pattern dimensions: 20.4, 14.4, 0.8, 1.5, 0.5.</p>

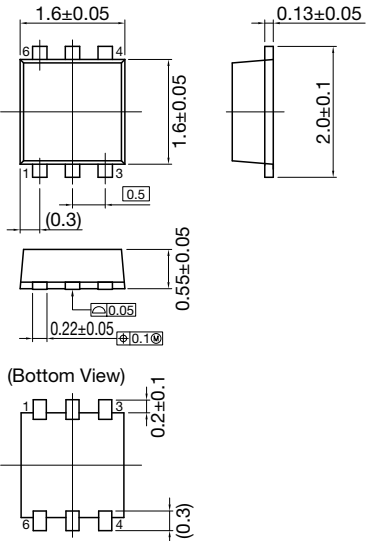
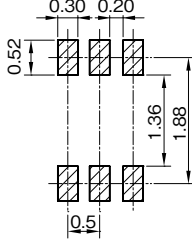
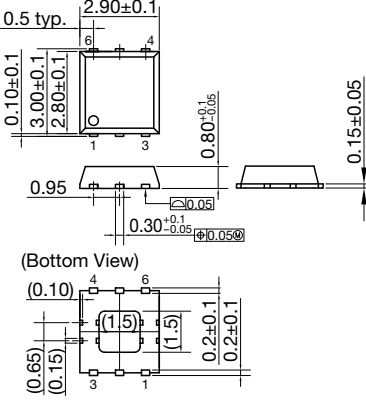
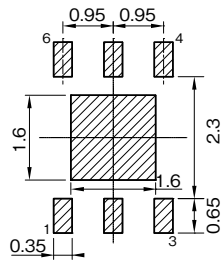
Package

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 style="text-align: center;">SON-6A</p>	 <p>Top View</p> <ul style="list-style-type: none"> Width: 1.6 ± 0.2 Length: 2.6 ± 0.1 Pin 1 offset: 0.50 Pin 2 offset: 0.8 MAX Pin 3 offset: 0.2 ± 0.1 Pin 4 offset: 0.05 Pin 5 offset: 0.05 Pin 6 offset: 0.05 <p>Bottom View</p> <ul style="list-style-type: none"> Pin 1 offset: (0.3) Pin 2 offset: (2.0) Pin 3 offset: (1.1) Pin 4 offset: (0.15) Pin 5 offset: (1.35) Pin 6 offset: (0.1) 	 <p>Pin width: 0.50</p> <p>Pin pitch: 2.75</p> <p>Pin offset from center: 0.65</p> <p>Pin offset from edge: 0.25</p>
<p style="text-align: center;">SON-6B</p>	 <p>Top View</p> <ul style="list-style-type: none"> Width: 1.6 ± 0.2 Length: 2.6 ± 0.1 Pin 1 offset: 0.50 Pin 2 offset: 0.8 max Pin 3 offset: 0.2 ± 0.1 Pin 4 offset: 0.05 Pin 5 offset: 0.05 Pin 6 offset: 0.05 <p>(Bottom View)</p> <ul style="list-style-type: none"> Pin 1 offset: (0.3) Pin 2 offset: (2.0) Pin 3 offset: (1.1) Pin 4 offset: (0.15) Pin 5 offset: (1.35) Pin 6 offset: (0.05) 	 <p>Pin width: 0.50</p> <p>Pin pitch: 2.75</p> <p>Pin offset from center: 0.65</p> <p>Pin offset from edge: 0.25</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 length).</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: 0.30 (pad width), 0.20 (pad length), 0.52 (pitch), 1.36 (total width), 1.88 (total length), 0.5 (pitch).</p>
<p style="text-align: center;">SON-6D</p>	 <p>Top View: 0.5 typ. (lead length), 2.90 ± 0.1 (width), 0.10 ± 0.1 (lead width), 3.00 ± 0.1 (total width), 2.80 ± 0.1 (total length), 0.80 ± 0.05 (height), 0.15 ± 0.05 (lead height), 0.95 (lead length), 0.30 ± 0.05 (lead thickness), $\phi 0.05$ (lead diameter).</p> <p>Bottom View: (0.10) (lead width), (1.5) (pitch), 0.2 ± 0.1 (lead width), 0.2 ± 0.1 (pitch).</p>	 <p>Land Pattern: 0.95 (pad width), 0.95 (pad length), 1.6 (total width), 2.3 (total length), 0.65 (pitch), 0.35 (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>		

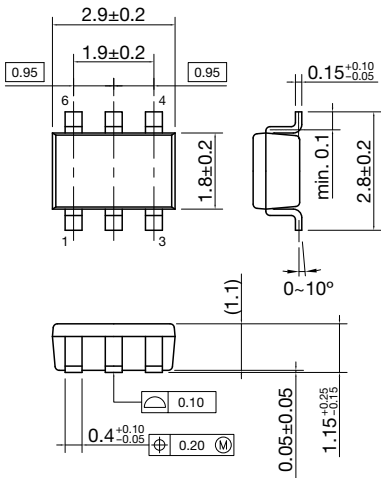
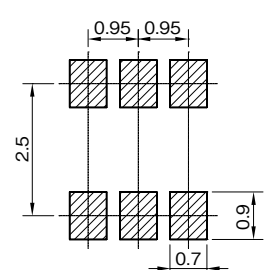
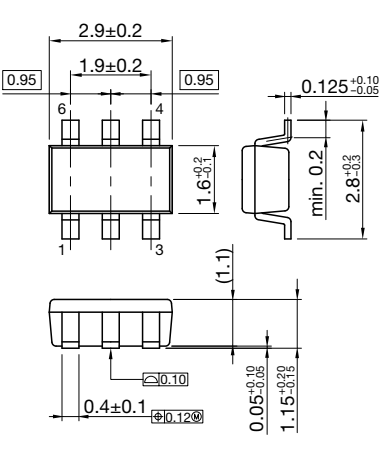
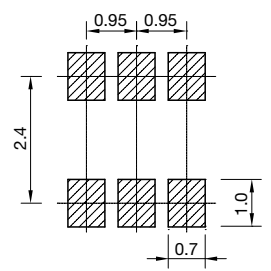
for package

Package

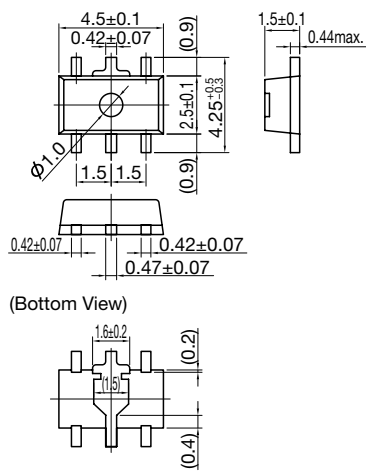
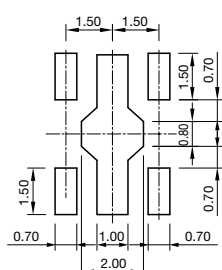
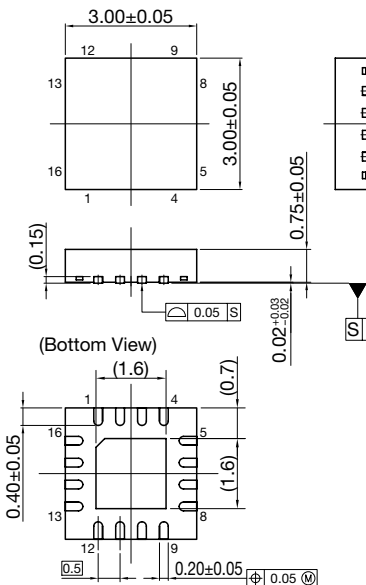
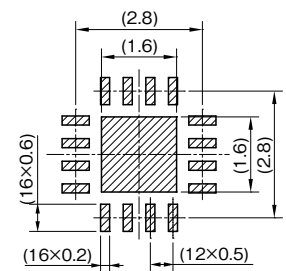
Package

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 are indicated.</p> <p>Side view dimensions: 0.15±0.10, min. 0.2, 2.8±0.2.</p> <p>Detail view dimensions: 0.4±0.10, 0.05±0.10, 1.15±0.25, (1.1), 0.10.</p>	<p>Land pattern dimensions: 0.7, 1.0, 2.4, 0.95, 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. Pins 1, 3, 4, 5 are indicated.</p> <p>Side view dimensions: 0.15±0.10, min. 0.2, 2.8±0.2.</p> <p>Detail view dimensions: 0.4±0.10, 0.05±0.05, 1.15±0.25, (1.1), 0.10, 0.20.</p>	<p>Land pattern dimensions: 0.7, 1.0, 2.4, 0.95, 0.95.</p>

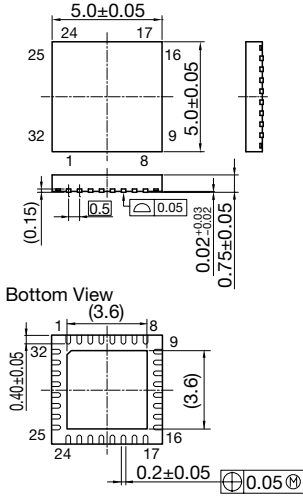
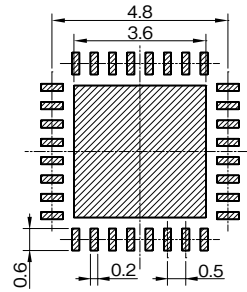
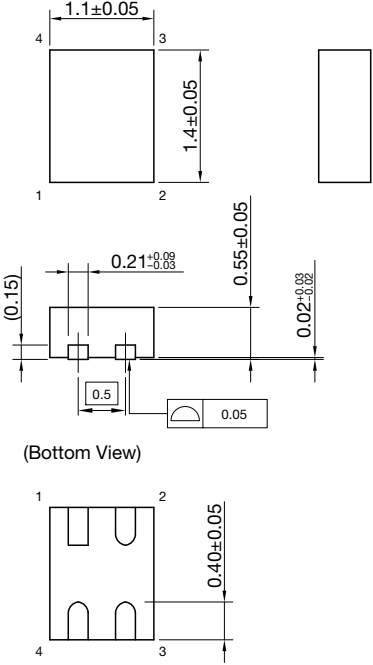
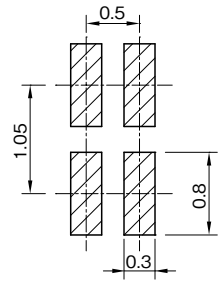
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SOT-26A</p>	 <p>Top view dimensions: 2.9±0.2, 1.9±0.2, 0.95, 0.95, 1.8±0.2, 0.15^{+0.10}/_{-0.05}, 0.4^{+0.10}/_{-0.05}, 0.20, 0.05±0.05, 1.15^{+0.25}/_{-0.15}.</p> <p>Side view dimensions: 2.8±0.2, min. 0.1, 0~10°.</p> <p>Bottom view dimensions: 0.10, 0.4±0.1, 0.05±0.05, 1.15^{+0.25}/_{-0.15}.</p>	 <p>Land pattern dimensions: 0.95, 0.95, 2.5, 0.9, 0.7.</p>
<p>SOT-26B</p>	 <p>Top view dimensions: 2.9±0.2, 1.9±0.2, 0.95, 0.95, 1.6±0.2, 0.125^{+0.10}/_{-0.05}, 0.4±0.1, 0.12, 0.05±0.05, 1.15^{+0.29}/_{-0.15}.</p> <p>Side view dimensions: 2.8^{+0.2}/_{-0.3}, min. 0.2, (1.1).</p> <p>Bottom view dimensions: 0.10, 0.4±0.1, 0.05±0.05, 1.15^{+0.29}/_{-0.15}.</p>	 <p>Land pattern dimensions: 0.95, 0.95, 2.4, 1.0, 0.7.</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>Land Pattern 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>Land Pattern Dimensions: (2.8), (1.6), (16×0.6), (16×0.2), (12×0.5), (1.6), (2.8)</p>

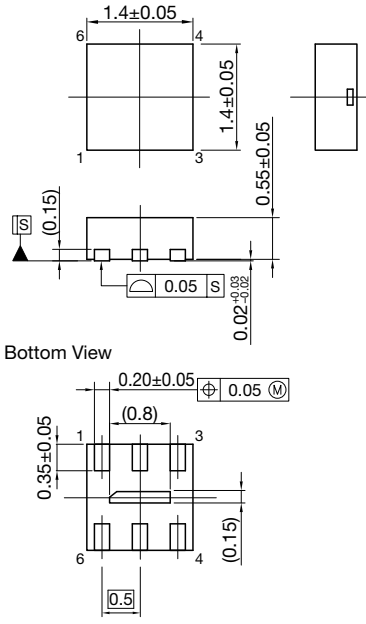
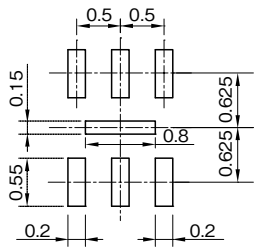
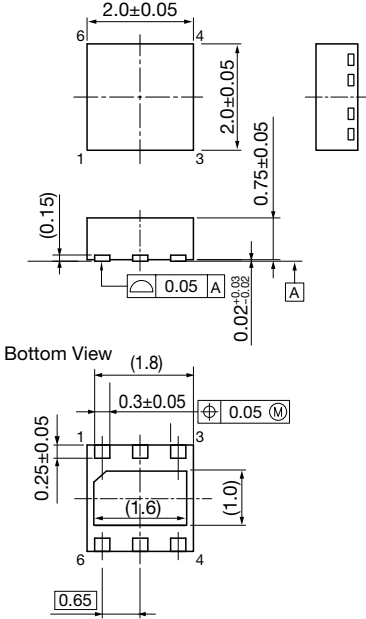
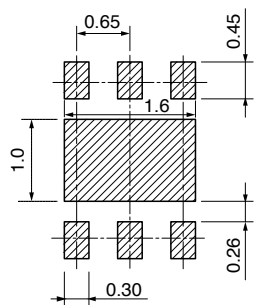
Package

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>

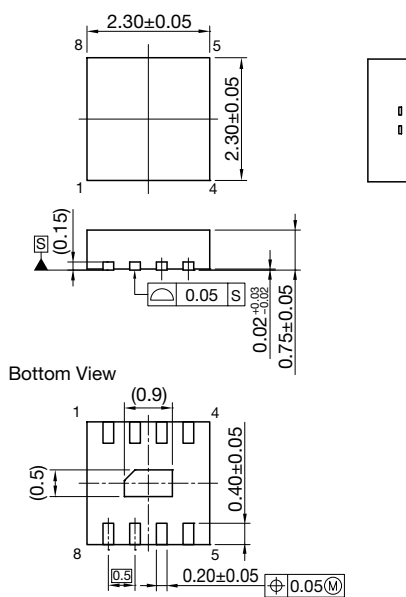
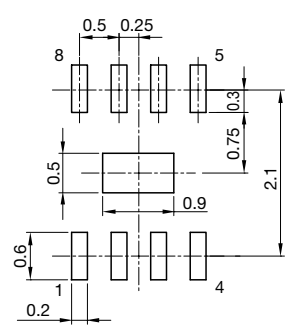
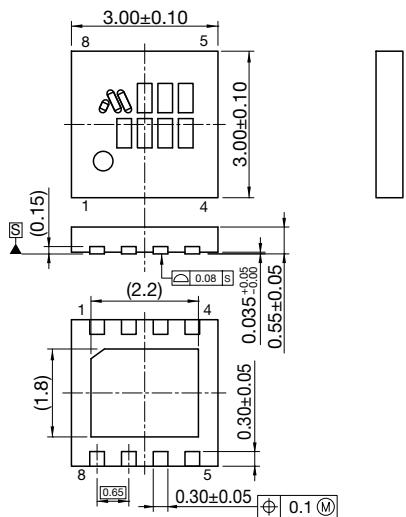
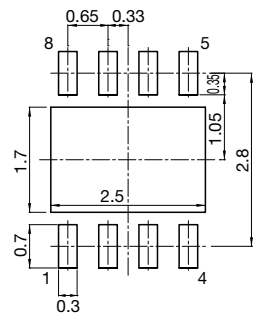
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-6A</p>		
<p>SSON-6E</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 height), 0.05 (lead width), 0.15 (pitch).</p> <p>Bottom View: 0.20±0.05 (pitch), 0.05 (pin width), 0.35±0.05 (width), 0.8 (width), 0.15 (height), 0.5 (width), pins 1, 3, 4, 6.</p>	 <p>0.5, 0.5 (pad width), 0.15 (pitch), 0.8 (width), 0.625 (width), 0.55 (height), 0.2 (width).</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 height), 0.05 (lead width), 0.15 (pitch), A (lead angle).</p> <p>Bottom View: 1.8 (width), 0.3±0.05 (pitch), 0.05 (pin width), 0.25±0.05 (width), 1.6 (width), 1.0 (width), 0.65 (width), pins 1, 3, 4, 6.</p>	 <p>0.65 (pad width), 0.45 (height), 1.6 (width), 1.0 (height), 0.30 (width), 0.26 (width).</p>

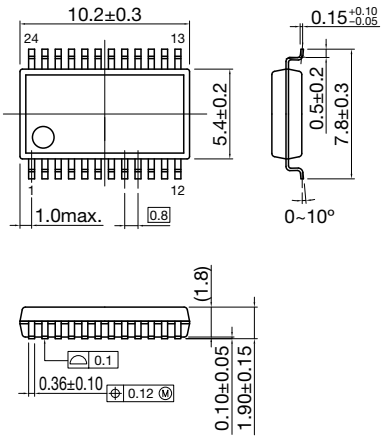
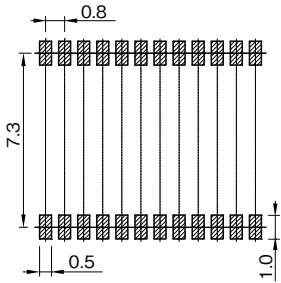
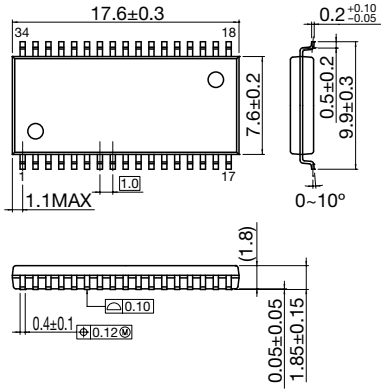
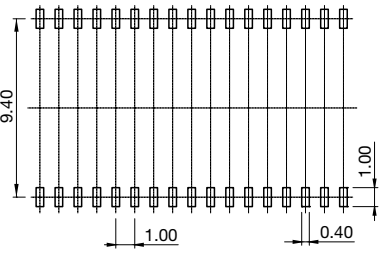
Package

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 0.3. Pin positions 1, 4, 5, 8.</p> <p>Side View: Package height 0.75±0.05, lead height 0.02±0.002, lead thickness 0.05, lead angle 0.15°. Pin diameter 0.3.</p> <p>Bottom View: Pin pitch 0.20±0.05, pin width 0.5, pin offset 0.40±0.05, pin positions 1, 4, 5, 8. Pin diameter 0.3.</p>	 <p>Pin pitch: 0.5, Pin width: 0.25, Pin offset: 0.3, Pin diameter: 0.3, Pad width: 0.5, Pad offset: 0.9, Pad diameter: 0.6, Pad offset: 0.2, Pad diameter: 0.2, Pad diameter: 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 0.3. Pin positions 1, 4, 5, 8.</p> <p>Side View: Package height 0.55±0.05, lead height 0.035±0.005, lead thickness 0.08, lead angle 0.15°. Pin diameter 0.3.</p> <p>Bottom View: Pin pitch 0.30±0.05, pin width 0.65, pin offset 0.30±0.05, pin positions 1, 4, 5, 8. Pin diameter 0.3.</p>	 <p>Pin pitch: 0.5, Pin width: 0.33, Pin offset: 0.3, Pin diameter: 0.3, Pad width: 0.65, Pad offset: 1.05, Pad diameter: 0.7, Pad offset: 0.3, Pad diameter: 2.8.</p>

Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>SSON-10A</p>	<p>Top View: Overall width 2.7, pin 1 to pin 5 distance 1.0, pin 5 to pin 6 distance 0.6, total height 2.5.</p> <p>Side View: Pin height 0.15, package height 0.55, lead thickness 0.02, lead width 0.05, lead angle A.</p> <p>Bottom View: Pin 1 to pin 5 distance 0.3, pin 1 to pin 10 distance 0.1, pin 5 to pin 6 distance 0.5, package width 1.5, pin 10 to pin 6 distance 0.2, pin 10 to pin 1 distance 0.5.</p>	<p>Land Pattern: Pad width 0.50, pad pitch 0.50, pad length 0.45, pad to package edge distance 1.50, pad to package edge distance 2.90, pad to package edge distance 0.10, pad to package edge distance 0.30, pad to package edge distance 0.20.</p>
<p>SSOP-8A</p>	<p>Top View: Pin 1 to pin 8 distance 2.0±0.3, pin 5 to pin 8 distance 2.3±0.2, pin 1 to pin 4 distance 0.5, pin 1 to pin 5 distance 0.25, pin 5 to pin 8 distance 0.7.</p> <p>Side View: Lead height 0.13, lead length 3.1±0.3, lead thickness MIN0.1, lead angle 0-10°.</p> <p>Bottom View: Pin 1 to pin 8 distance 0.2±0.05/-0.04, pin 1 to pin 5 distance 0.1, pin 5 to pin 8 distance 0.05±0.10/-0.00, pin 1 to pin 8 distance 0.75±0.15.</p>	<p>Land Pattern: Pad width 0.50, pad pitch 0.50, pad length 3.05, pad to package edge distance 0.55, pad to package edge distance 0.25.</p>

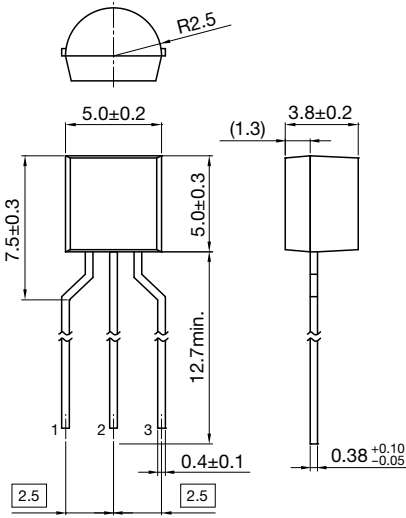
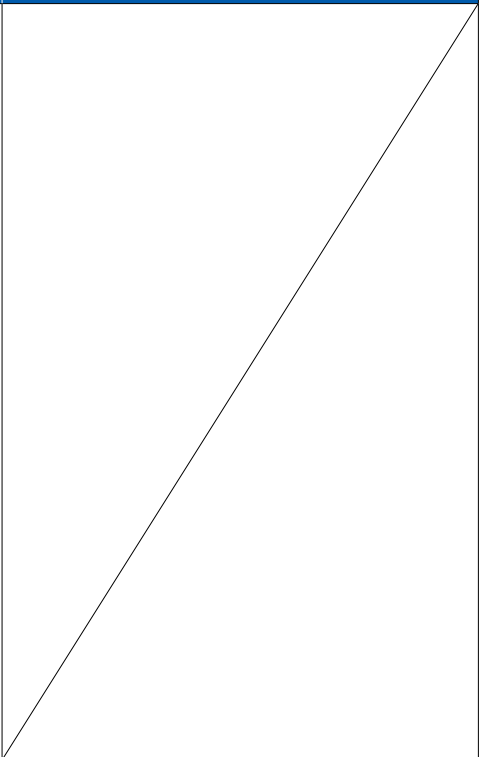
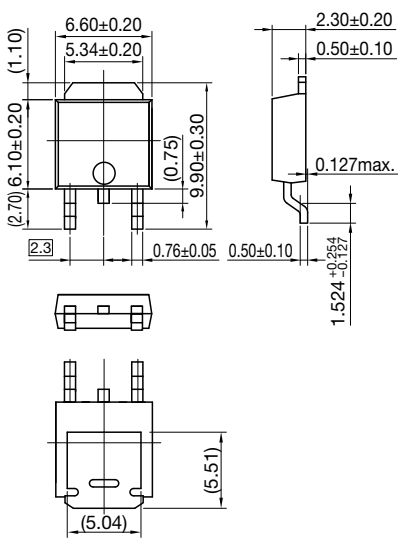
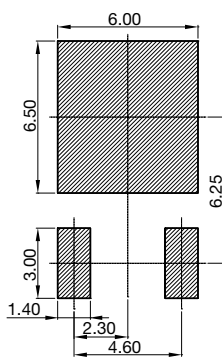
Package

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, height 6.10±0.20, lead length 1.524 (+0.254/-0.127), and lead diameter 0.76±0.05.</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, 1.27, 0.50±0.10, 0.10, 0.127, 0.10, 0.50±0.10, 1.524^{+0.254}/_{-0.127}.</p> <p>Side view dimensions: 0.50±0.10, 1.524^{+0.254}/_{-0.127}.</p> <p>Detail view dimensions: 0.127max., (1.00), 2.30±0.20, (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, 0.65, 0.525max., 16, 9.</p> <p>Side view dimensions: 0.15^{+0.10}/_{-0.05}, 0.5±0.2, 6.4±0.3, 0~10°.</p> <p>Detail view dimensions: (1.0), 0.10, 0.22±0.1, 0.10, 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>		

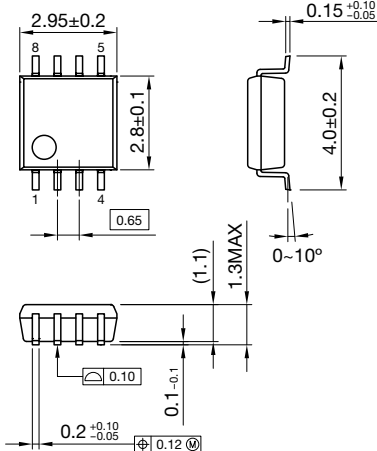
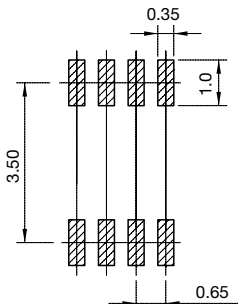
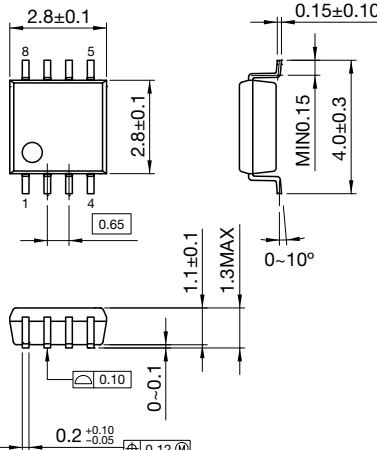
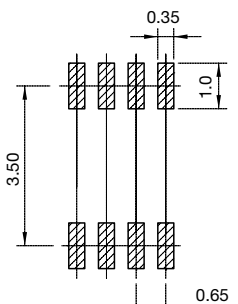
Package

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

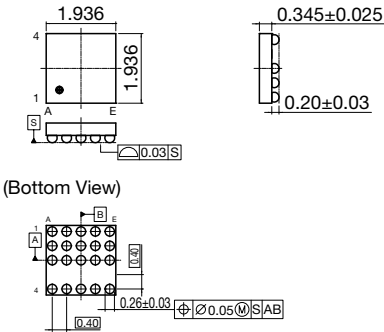
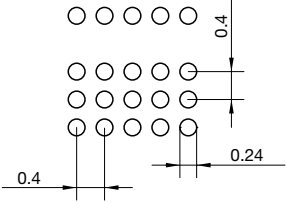
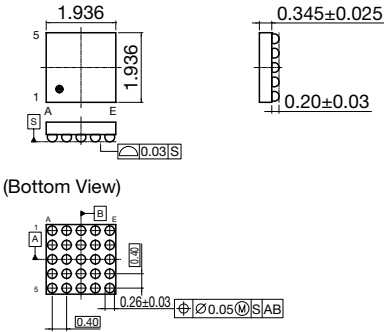
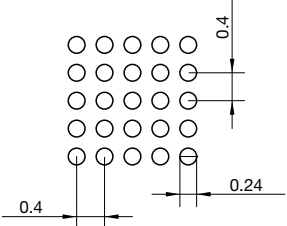
Package

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>

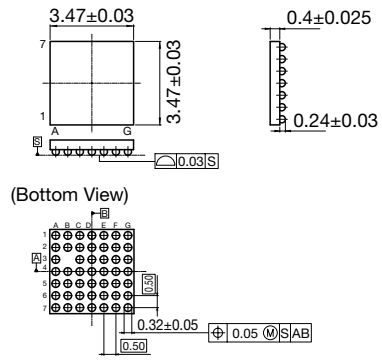
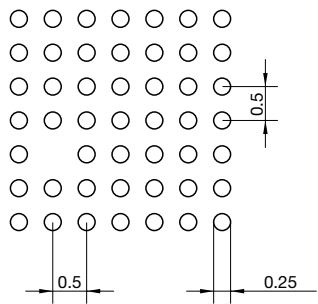
Package

Package Name	Dimensional Drawing	Recommended Land Pattern
<p>VSOP-8C</p>	 <p>Dimensional drawing of the VSOP-8C package. The drawing includes a top view, a side view, and a bottom view. Key dimensions are: top width 2.95 ± 0.2, top height 2.8 ± 0.1, lead width $0.15^{+0.10}_{-0.05}$, total height 4.0 ± 0.2, lead angle $0 \sim 10^\circ$, lead length 1.3 MAX, lead thickness 0.1, bottom width $0.2^{+0.10}_{-0.05}$, and hole diameter $\phi 0.12$. Pin numbers 1, 4, 5, and 8 are indicated.</p>	 <p>Recommended land pattern for the VSOP-8C package. The pattern shows four pins with a pitch of 0.35 and a total width of 1.0. The distance between the center of the first and last pins is 3.50. The hole diameter is 0.65.</p>
<p>VSOP-8D</p>	 <p>Dimensional drawing of the VSOP-8D package. The drawing includes a top view, a side view, and a bottom view. Key dimensions are: top width 2.8 ± 0.1, top height 2.8 ± 0.1, lead width 0.15 ± 0.10, total height 4.0 ± 0.3, lead angle $0 \sim 10^\circ$, lead length 1.1 ± 0.1 and 1.3 MAX, lead thickness 0.1, bottom width $0.2^{+0.10}_{-0.05}$, and hole diameter $\phi 0.12$. Pin numbers 1, 4, 5, and 8 are indicated.</p>	 <p>Recommended land pattern for the VSOP-8D package. The pattern shows four pins with a pitch of 0.35 and a total width of 1.0. The distance between the center of the first and last pins is 3.50. The hole diameter is 0.65.</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 (length) 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 (lead length) 0.05 (lead thickness)</p>	 <p>Recommended Land Pattern Dimensions: 0.5 (pitch) 0.25 (lead length)</p>