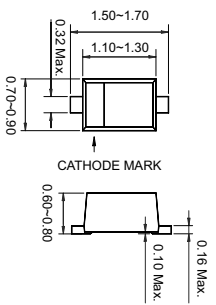
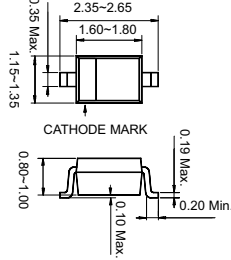
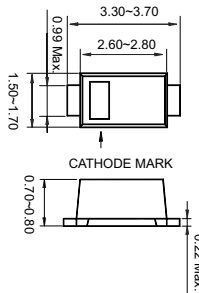
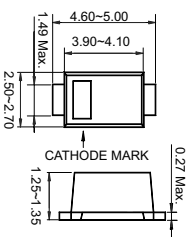
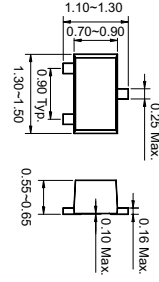
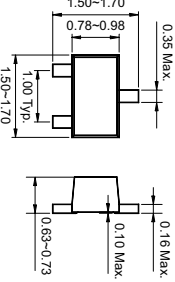
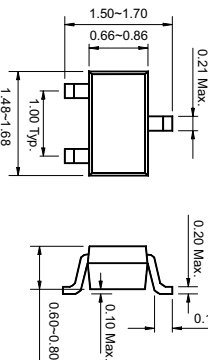
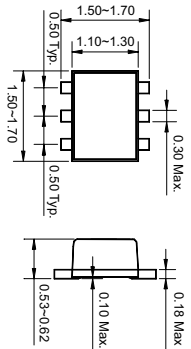
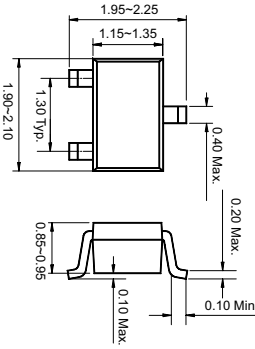


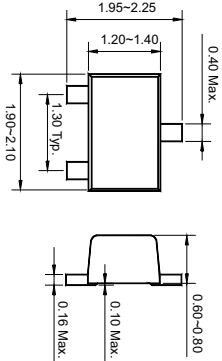
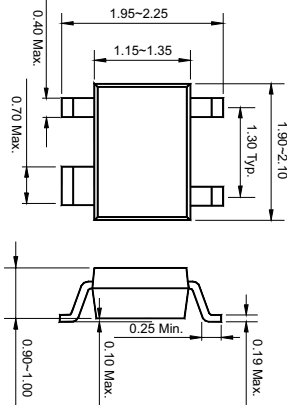
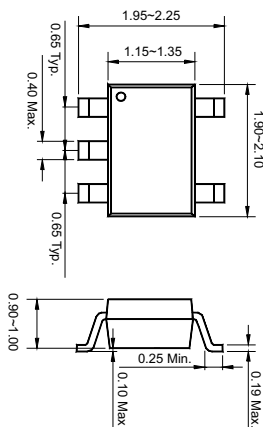
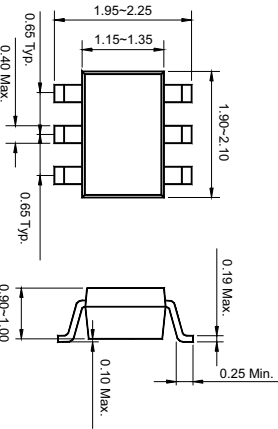
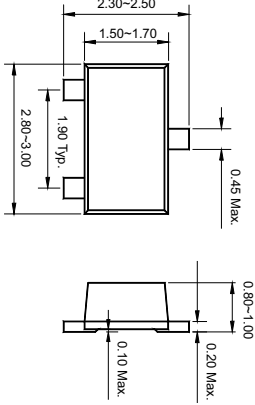
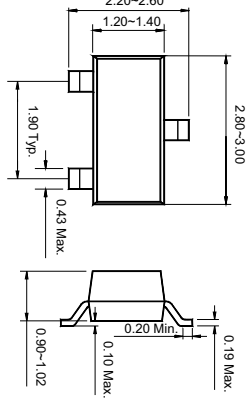
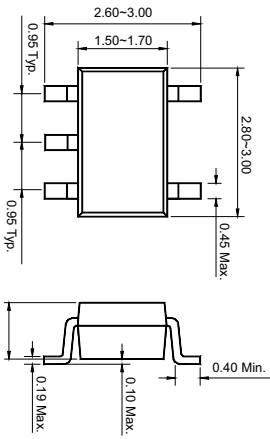
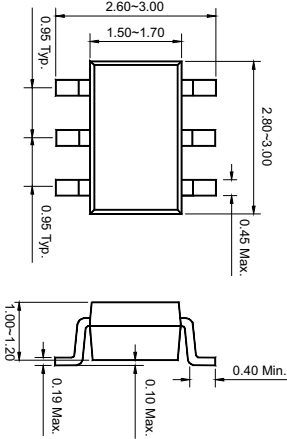
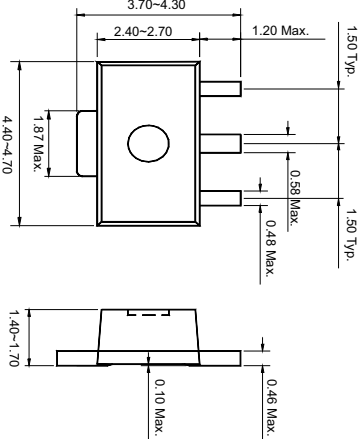
PACKAGE DIMENSION

SMD TYPE [unit : mm]

SOD-923	SOT-923	LLP-3L
 <p>1.50-1.70 1.10-1.30 0.32 Max. 0.70-0.90 CATHODE MARK 0.60-0.80 0.10 Max. 0.16 Max.</p>	 <p>2.35-2.65 1.60-1.80 0.35 Max. 1.15-1.35 CATHODE MARK 0.80-1.00 0.19 Max. 0.10 Max. 0.20 Min.</p>	 <p>3.30-3.70 2.60-2.80 0.99 Max. 1.50-1.70 CATHODE MARK 0.70-0.80 0.22 Max.</p>
 <p>4.60-5.00 3.90-4.10 1.49 Max. 2.50-2.70 CATHODE MARK 1.25-1.35 0.27 Max.</p>	 <p>1.10-1.30 0.70-0.90 1.30-1.50 0.90 Typ. 0.55-0.65 0.10 Max. 0.16 Max. 0.25 Max.</p>	 <p>1.50-1.70 0.78-0.98 0.35 Max. 1.00 Typ. 1.50-1.70 0.63-0.73 0.10 Max. 0.16 Max.</p>
 <p>1.50-1.70 0.66-0.86 0.21 Max. 1.48-1.68 1.00 Typ. 0.20 Max. 0.10 Max. 0.15 Min. 0.60-0.80</p>	 <p>1.50-1.70 1.10-1.30 0.50 Typ. 1.50-1.70 0.50 Typ. 0.59-0.62 0.10 Max. 0.18 Max. 0.30 Max.</p>	 <p>1.95-2.25 1.15-1.35 1.30 Typ. 1.90-2.10 0.40 Max. 0.20 Max. 0.10 Min. 0.95-0.95 0.10 Max.</p>

PACKAGE DIMENSION

SMD TYPE [unit : mm]

SOT-323F	SOT-343	SOT-353
 <p>Top view dimensions: 1.95~2.25, 1.20~1.40, 0.40 Max., 1.30 Typ., 1.90~2.10.</p> <p>Side view dimensions: 0.16 Max., 0.10 Max., 0.80~0.80.</p>	 <p>Top view dimensions: 1.95~2.25, 1.15~1.35, 0.40 Max., 0.70 Max., 1.30 Typ., 1.90~2.10.</p> <p>Side view dimensions: 0.25 Min., 0.19 Max., 0.90~1.00.</p>	 <p>Top view dimensions: 1.95~2.25, 1.15~1.35, 0.85 Typ., 0.40 Max., 1.90~2.10, 0.65 Typ.</p> <p>Side view dimensions: 0.90~1.00, 0.25 Min., 0.19 Max., 0.10 Max.</p>
SOT-363	SOT-23F	SOT-23
 <p>Top view dimensions: 1.95~2.25, 1.15~1.35, 0.65 Typ., 0.40 Max., 1.90~2.10, 0.65 Typ.</p> <p>Side view dimensions: 0.19 Max., 0.90~1.00, 0.10 Max., 0.25 Min.</p>	 <p>Top view dimensions: 2.30~2.50, 1.50~1.70, 1.90 Typ., 2.80~3.00, 0.45 Max.</p> <p>Side view dimensions: 0.80~1.00, 0.10 Max., 0.20 Max.</p>	 <p>Top view dimensions: 2.20~2.60, 1.20~1.40, 1.90 Typ., 2.80~3.00, 0.43 Max.</p> <p>Side view dimensions: 0.90~1.02, 0.10 Max., 0.19 Max., 0.20 Min.</p>
SOT-25	SOT-26	SOT-89
 <p>Top view dimensions: 2.60~3.00, 1.50~1.70, 0.95 Typ., 2.80~3.00, 0.45 Max., 0.95 Typ.</p> <p>Side view dimensions: 1.00~1.20, 0.19 Max., 0.10 Max., 0.40 Min.</p>	 <p>Top view dimensions: 2.60~3.00, 1.50~1.70, 0.95 Typ., 2.80~3.00, 0.45 Max., 0.95 Typ.</p> <p>Side view dimensions: 1.00~1.20, 0.19 Max., 0.10 Max., 0.40 Min.</p>	 <p>Top view dimensions: 3.70~4.30, 2.40~2.70, 1.20 Max., 1.50 Typ., 1.90 Typ., 1.30 Typ., 0.58 Max., 0.48 Max., 1.87 Max., 4.40~4.70.</p> <p>Side view dimensions: 1.40~1.70, 0.10 Max., 0.46 Max., 0.40 Min.</p>

PACKAGE DIMENSION

SMD TYPE [unit : mm]

SOT-223	D-PAK(TO-252)	D-PAK-5L
<p>6.80-7.20 3.40-3.60 2.30 Typ. 3.05 Max. 6.40-6.60 0.76 Max. 2.30 Typ. 1.60-1.70 0.45 Min. 0.10 Max.</p>	<p>6.50-6.70 5.10-5.50 7.77-7.97 1.18 Max. 2.10-2.50 1.15 Max. 0.83 Max. 2.30 Typ. 2.30 Typ. 0.55 Max.</p>	<p>6.50-6.70 5.10-5.50 7.77-7.97 1.18 Max. 2.10-2.50 1.15 Max. 0.83 Typ. 1.15 Typ. 4.60 Typ. 0.55 Max.</p>
SOP-8	SOP-14	SOP-16
<p>5.87-6.17 3.70-3.90 3.81 Typ. 0.27 Max. 0.52 Max. 4.80-5.00 1.27 Typ. 0.27 Max. 1.24-1.44 0.46 Min.</p>	<p>5.87-6.17 3.76-3.96 3.81 Typ. 0.27 Max. 0.52 Max. 8.53-8.73 1.27 Typ. 0.27 Max. 1.24-1.44 0.46 Min.</p>	<p>5.87-6.17 3.76-3.96 3.81 Typ. 0.27 Max. 0.52 Max. 9.80-10.00 1.27 Typ. 0.27 Max. 1.24-1.44 0.46 Min.</p>
SOP-20	SOP-24	SSOPH-28
<p>10.10-10.64 7.39-7.59 3.81 Typ. 0.30 Max. 0.52 Max. 12.60-13.00 1.27 Typ. 0.27 Max. 2.26-2.34 0.46 Min.</p>	<p>10.32 Typ. 7.52 Typ. 2.56 Typ. 1.27 Typ. 0.41 Typ. 15.42 Typ. 2.56 Typ. 0.58 Typ. 0.22 Typ.</p>	<p>9.80-10.20 7.40-7.60 3.81 Typ. 0.50 Max. 0.13 Max. 18.30-18.50 19.80-20.10 5.10-5.30 0.80 Typ. 0.21 Max. 2.20-2.40 0.45 Min.</p>

PACKAGE DIMENSION

SMD TYPE [unit : mm]

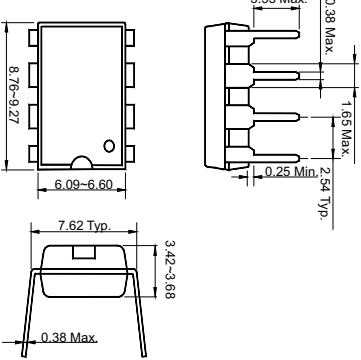
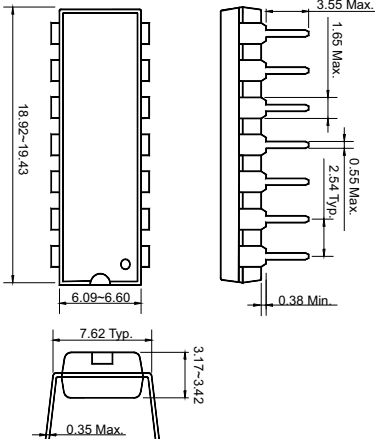
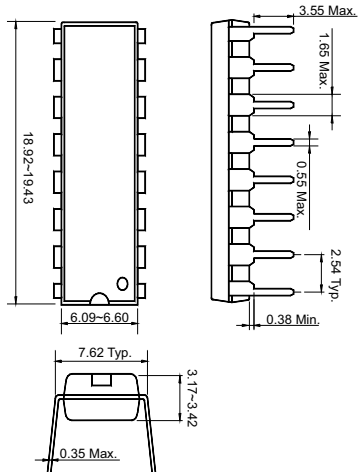
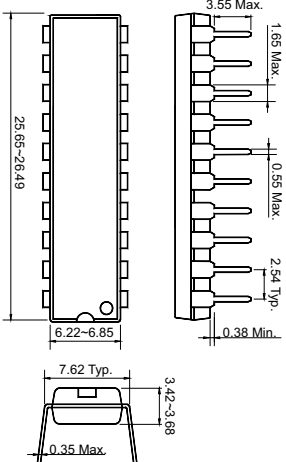
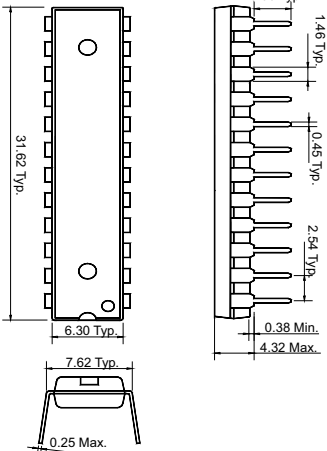
QFP-64	QFP-80	
<p>Technical drawing of QFP-64 package showing top, side, and cross-sectional views with dimensions: 23.65-24.15, 19.90-20.10, 13.90-14.10, 17.65-18.15, 0.25 Max., 1.00 Typ., 0.50 Max., 1.95 Typ., 0.85 Min., 0.23 Max., 2.60-2.90.</p>	<p>Technical drawing of QFP-80 package showing top, side, and cross-sectional views with dimensions: 22.95-23.45, 19.90-20.10, 13.90-14.10, 16.95-17.45, 0.25 Max., 0.45 Max., 0.80 Typ., 1.60 Typ., 0.73 Min., 0.23 Max., 2.50-2.90.</p>	

PACKAGE DIMENSION

DIP TYPE [unit : mm]

TO-92	TO-92N	TO-92L
TO-92-2L	MPT	TO-220F-3L
TO-220F-3SL	TO-220F-2L	TO-220AB

DIP TYPE [unit : mm]

DIP-8	DIP-14	DIP-16
 <p>Dimensions for DIP-8 package:</p> <ul style="list-style-type: none"> Top view: 8.76-9.27 (width), 6.09-6.60 (length) Side view: 3.55 Max. (height), 0.38 Max. (lead height), 1.65 Max. (lead length), 0.25 Min. (lead thickness), 2.54 Typ. (lead pitch) Bottom view: 7.62 Typ. (width), 3.42-3.68 (height), 0.38 Max. (lead thickness) 	 <p>Dimensions for DIP-14 package:</p> <ul style="list-style-type: none"> Top view: 18.92-19.43 (width), 6.09-6.60 (length) Side view: 3.55 Max. (height), 1.65 Max. (lead height), 0.55 Max. (lead length), 2.54 Typ. (lead pitch), 0.38 Min. (lead thickness) Bottom view: 7.62 Typ. (width), 3.17-3.42 (height), 0.35 Max. (lead thickness) 	 <p>Dimensions for DIP-16 package:</p> <ul style="list-style-type: none"> Top view: 18.92-19.43 (width), 6.09-6.60 (length) Side view: 3.55 Max. (height), 1.65 Max. (lead height), 0.55 Max. (lead length), 2.54 Typ. (lead pitch), 0.38 Min. (lead thickness) Bottom view: 7.62 Typ. (width), 3.17-3.42 (height), 0.35 Max. (lead thickness)
DIP-20	DIP-24	
 <p>Dimensions for DIP-20 package:</p> <ul style="list-style-type: none"> Top view: 25.65-26.49 (width), 6.22-6.85 (length) Side view: 3.55 Max. (height), 1.65 Max. (lead height), 0.55 Max. (lead length), 2.54 Typ. (lead pitch), 0.38 Min. (lead thickness) Bottom view: 7.62 Typ. (width), 3.42-3.68 (height), 0.35 Max. (lead thickness) 	 <p>Dimensions for DIP-24 package:</p> <ul style="list-style-type: none"> Top view: 31.62 Typ. (width), 6.30 Typ. (length) Side view: 3.30 Typ. (height), 1.46 Typ. (lead height), 0.45 Typ. (lead length), 2.54 Typ. (lead pitch), 0.38 Min. (lead thickness), 4.32 Max. (lead length) Bottom view: 7.62 Typ. (width), 0.25 Max. (lead thickness) 	