

●TSOT/SOT/SC

TSOT-23-3/SOT-23-3 -----	B3
TSOT-23-5/SOT-23-5 -----	B3
TSOT-23-6/SOT-23-6 -----	B3
TSOT-23-8/SOT-23-8 -----	B3
SC-70-3 -----	B4
SC-70-4 -----	B4
SC-70-5 -----	B4
SC-70-6 -----	B4
SC-82 -----	B5
SOT-143 -----	B5
SOT-223 -----	B5
SOT-89 -----	B6
SOT-89-5 -----	B6

●TO

TO-252 -----	B7
TO-252-4 -----	B7
TO-252-5 -----	B7
TO-263 -----	B8
TO-263-5 -----	B8
TO-263S-5 -----	B8
TO-263-7 -----	B8

●MSOP

MSOP-8 (Exposed Pad) -----	B9
MSOP-8 -----	B9
MSOP-10 (Exposed Pad) -----	B9
MSOP-10 -----	B9

●SOP

SOP-8 (Exposed Pad) -----	B10
SOP-8 -----	B10
SOP-14 -----	B10
SOP-16 -----	B10
SOP-16 (300 mil) -----	B10
SOP-20 -----	B11
SOP-24 -----	B11
SOP-28 -----	B11
SOP-32 -----	B11

●SSOP

SSOP-16 -----	B11
SSOP-28 -----	B11

●TSSOP

TSSOP-8 -----	B12
TSSOP-14 -----	B12
TSSOP-16 -----	B12
TSSOP-16 (Exposed Pad) -----	B12
TSSOP-20 -----	B13
TSSOP-24 -----	B13
TSSOP-28 -----	B13
TSSOP-32 -----	B13

●VDFN/WDFN

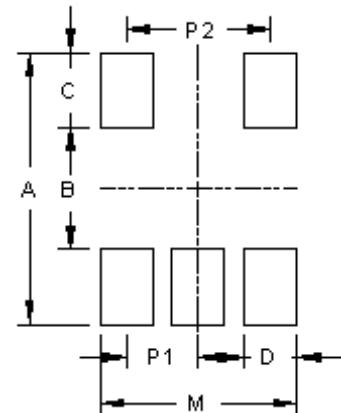
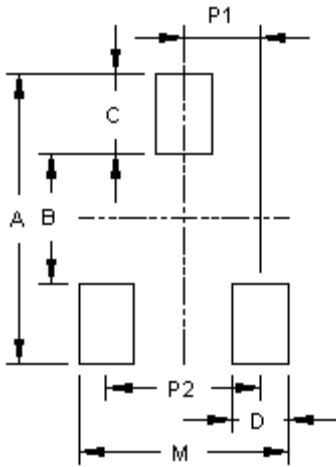
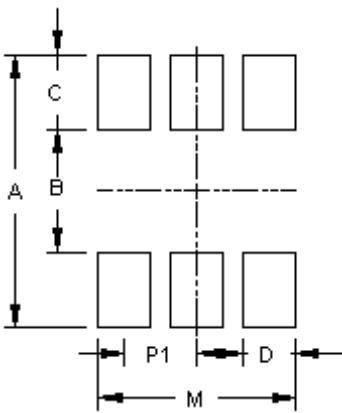
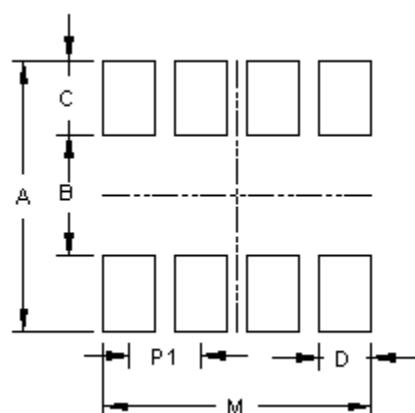
V/WDFN-2x2-6L -----	B13
V/WDFN-3x3-6L -----	B13
V/W/XDFN-2x2-8L -----	B13
V/WDFN-3x3-8L -----	B13
V/WDFN-3x3-10L -----	B14
V/WDFN-3x3-12L -----	B14
WDFN-4x3-12L -----	B14
VDFN-5x6-8L -----	B14

●VQFN/WQFN

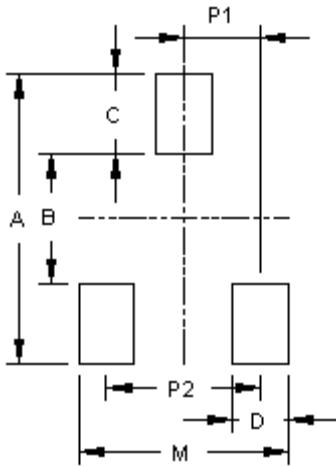
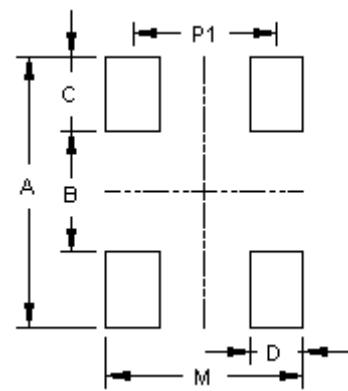
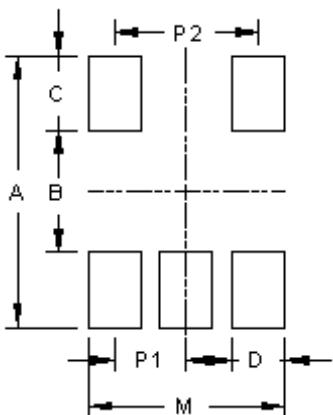
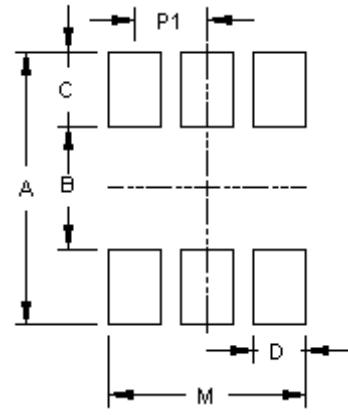
V/WQFN-3x3-16L -----	B15
V/WQFN-4x4-16L -----	B15
V/WQFN-5x5-16L -----	B15
V/WQFN-4x4-20L -----	B15
V/WQFN-4x4-24L -----	B15
V/WQFN-5x5-24L -----	B15
V/WQFN-5x5-28L -----	B16
V/WQFN-6x6-28L -----	B16
V/WQFN-5x5-32L -----	B16
V/WQFN-5x5-40L -----	B16
V/WQFN-6x6-40L -----	B16
V/WQFN-6x6-48L -----	B16
V/WQFN-7x7-48L -----	B16
V/W/XQFN-1.6x1.6-8L -----	B17
V/WQFN-3.5x3.5-14L -----	B17
V/WQFN-5x5-12L -----	B17

●WLCSP

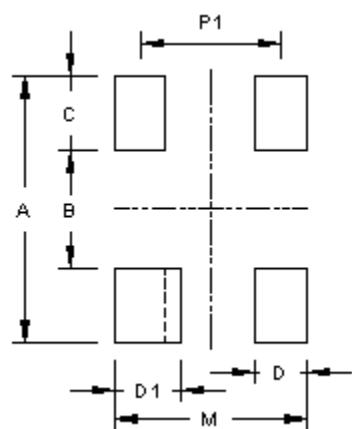
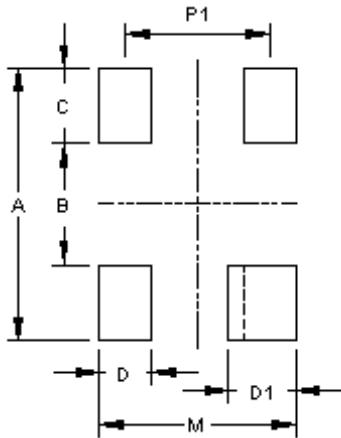
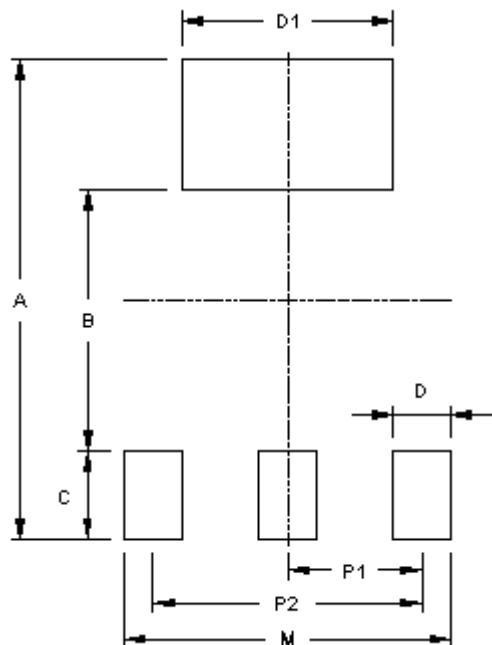
WL-CSP-1.5x1.5-8B -----	B17
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TSOT-23-3/SOT-23-3
TSOT-23-5/SOT-23-5

TSOT-23-6/SOT-23-6

TSOT-23-8/SOT-23-8


Package	Number of Pin	Footprint Dimension (mm)							Tolerance
		P1	P2	A	B	C	D	M	
(T)SOT-23-3	3	0.95	1.90	3.60	1.60	1.00	0.80	2.70	±0.10
(T)SOT-23-5	5	0.95	1.90	3.60	1.60	1.00	0.70	2.60	±0.10
(T)SOT-23-6	6	0.95	--	3.60	1.60	1.00	0.70	2.60	±0.10
(T)SOT-23-8	8	0.65	--	3.60	1.60	1.00	0.45	2.40	±0.10

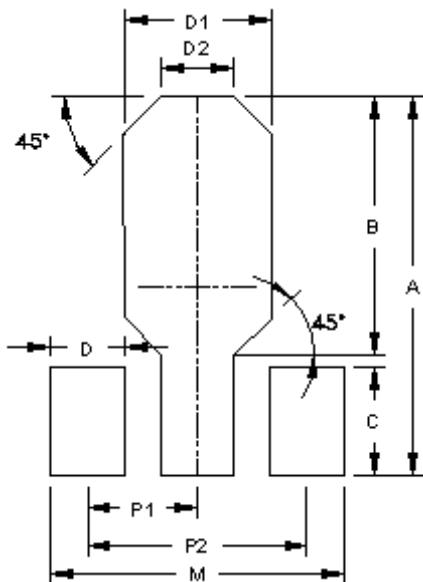
SC-70-3

SC-70-4

SC-70-5

SC-70-6


Package	Number of Pin	Footprint Dimension (mm)							Tolerance
		P1	P2	A	B	C	D	M	
SC-70-3	3	0.65	1.30	2.70	1.10	0.80	0.60	1.90	±0.10
SC-70-4	4	1.30	--	2.70	1.10	0.80	0.60	1.90	±0.10
SC-70-5	5	0.65	1.30	2.70	1.10	0.80	0.40	1.70	±0.10
SC-70-6	6	0.65	--	2.70	1.10	0.80	0.40	1.70	±0.10

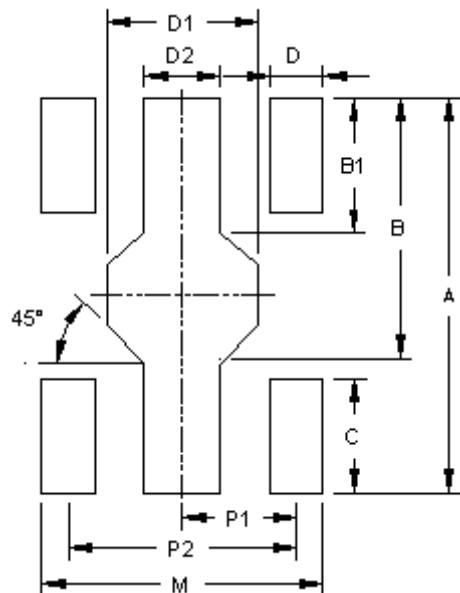
SC-82
SOT-143

SOT-223


Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P1	P2	A	B	C	D	D1	M	
SC-82	4	1.30	-	2.70	1.10	0.80	0.60	0.80	1.90	±0.10
SOT-143	4	1.90	--	3.30	1.30	1.00	0.60	1.03	2.50	±0.10
SOT-223	4	2.30	4.60	8.00	4.60	1.60	1.00	3.30	5.60	±0.10

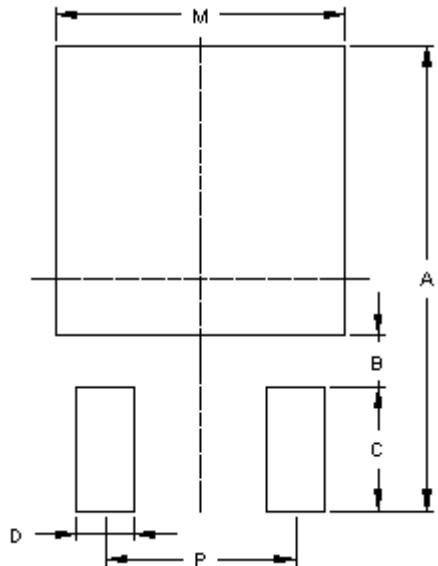
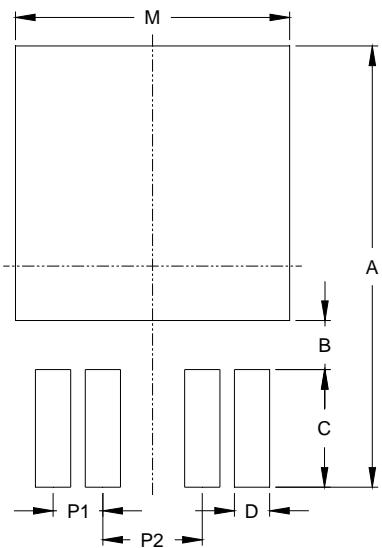
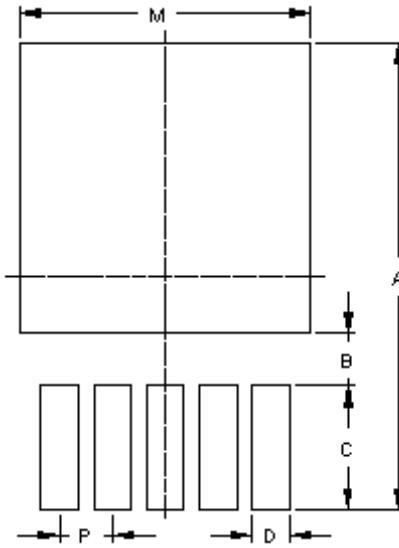
SOT-89



SOT-89-5



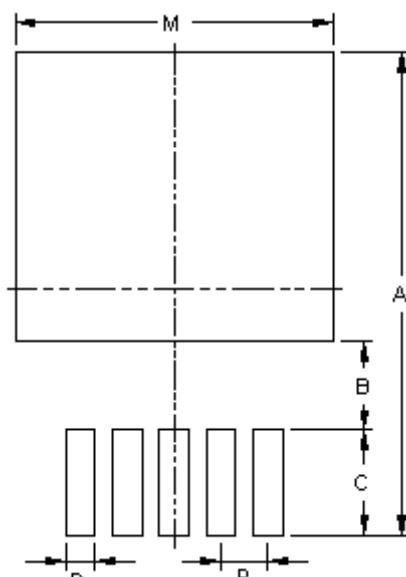
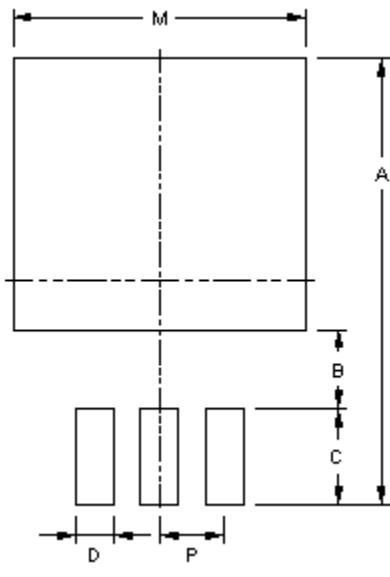
Package	Number of Pin	Footprint Dimension (mm)										Tolerance
		P1	P2	A	B	B1	C	D	D1	D2	M	
SOT-89	3	1.50	3.00	5.10	3.40	--	1.50	1.00	2.20	1.00	4.00	±0.10
SOT-89-5	5	1.50	3.00	5.50	3.80	1.70	1.50	0.70	2.20	1.00	3.70	±0.10

TO-252

TO-252-4

TO-252-5


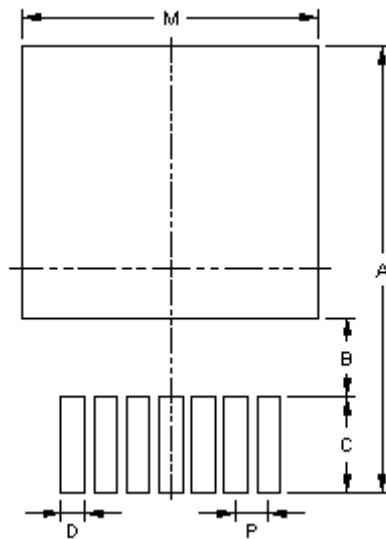
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	P1	P2	A	B	C	D	M	
TO-252	2	4.60	-	--	11.50	2.00	2.50	1.50	7.00	± 0.10
TO-252-4	4	--	1.27	2.54	11.50	2.00	2.50	1.00	7.00	± 0.10
TO-252-5	5	1.27	-	--	11.50	2.00	2.50	1.00	7.00	± 0.10

TO-263

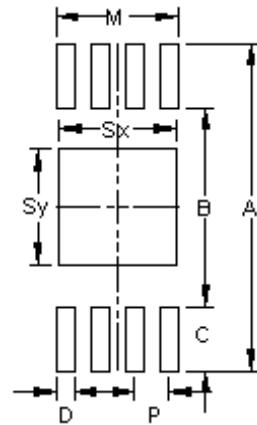
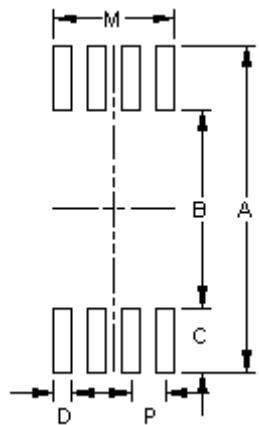
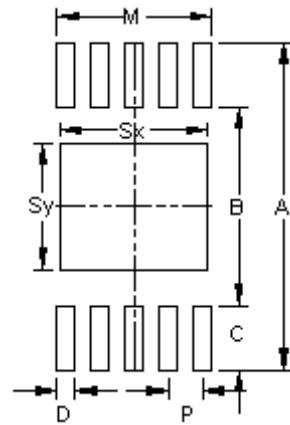
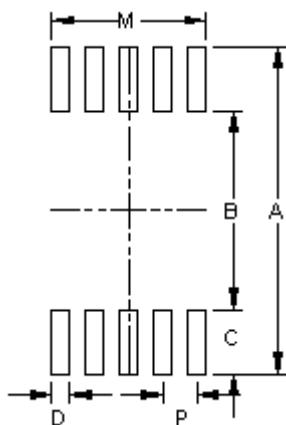
TO-263-5/TO-263S-5



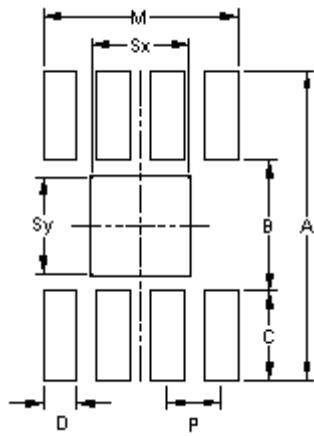
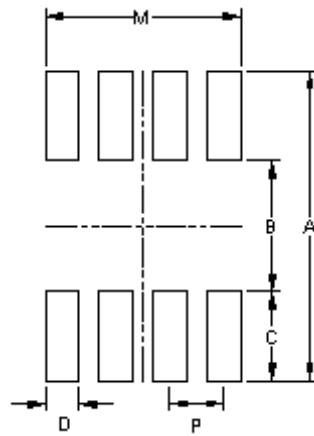
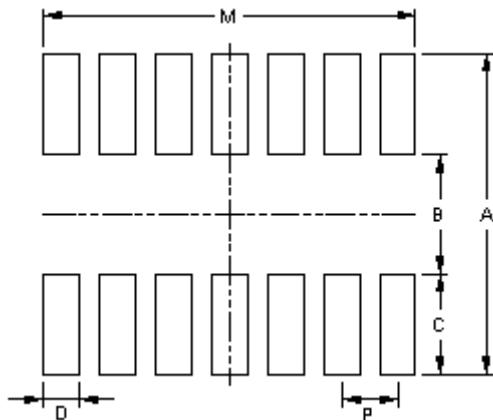
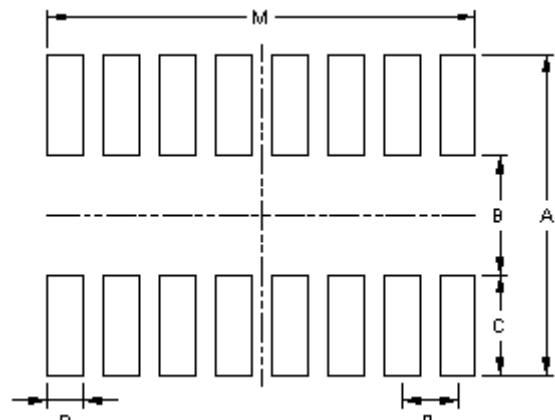
TO-263-7



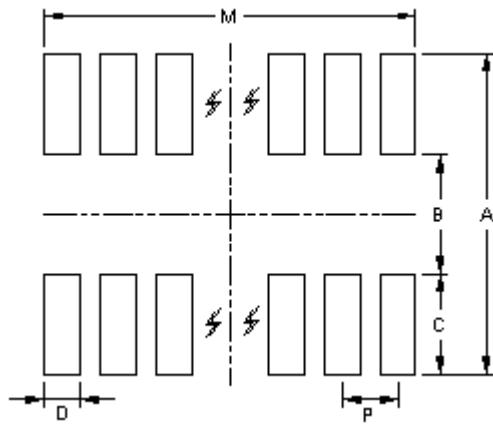
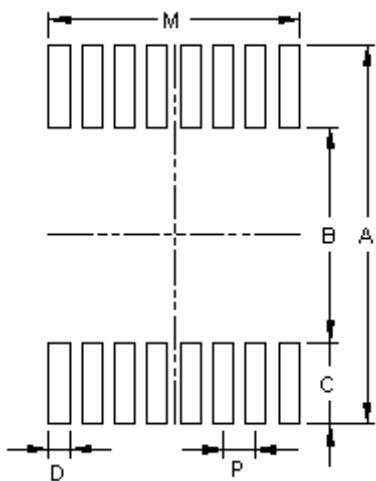
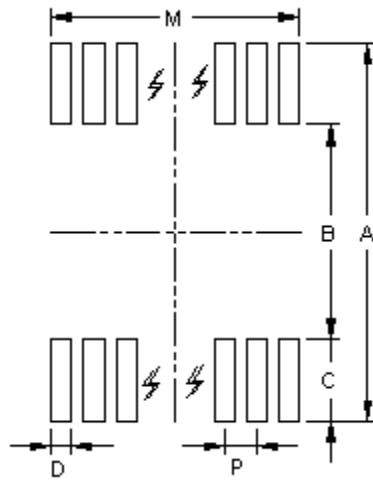
Package	Number of Pin	Footprint Dimension (mm)						Tolerance
		P	A	B	C	D	M	
TO-263	3	2.54	16.50	3.00	3.50	1.50	8.50	± 0.10
TO-263-5	5	1.70	17.00	3.00	4.00	1.31	8.50	± 0.10
TO-263S-5	5	1.70	16.00	3.00	3.00	1.31	8.50	± 0.10
TO-263-7	7	1.25	17.00	3.00	4.00	0.70	8.50	± 0.10

MSOP-8
MSOP-8 (Exposed Pad)

MSOP-10
MSOP-10 (Exposed Pad)


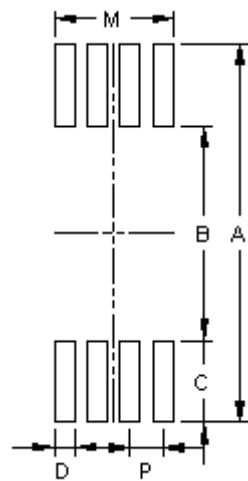
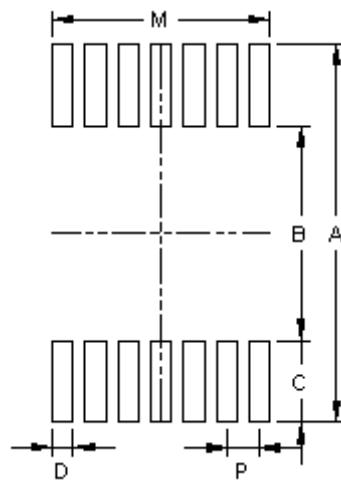
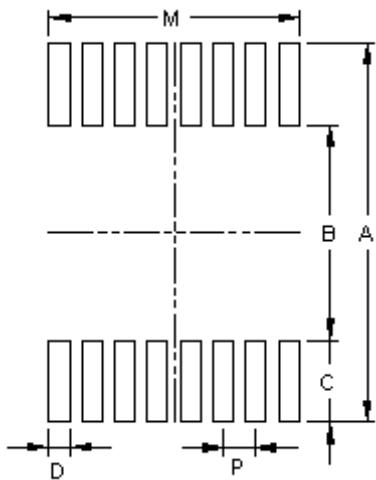
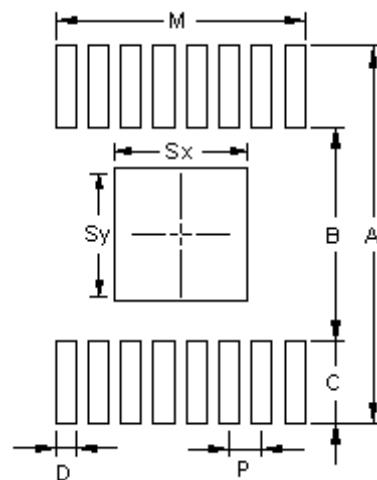
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	A	B	C	D	Sx	Sy	M	
MSOP-8	8	0.65	5.80	3.60	1.10	0.35	--	--	2.30	± 0.10
MSOP-8 (EP)	8	0.65	5.80	3.60	1.10	0.35	1.90	1.70	2.30	± 0.10
MSOP-10	10	0.50	5.80	3.60	1.10	0.25	--	--	2.25	± 0.10
MSOP-10 (EP)	10	0.50	5.80	3.60	1.10	0.25	1.90	1.70	2.25	± 0.10

SOP-8 (Exposed Pad)

SOP-8

SOP-14

SOP-16


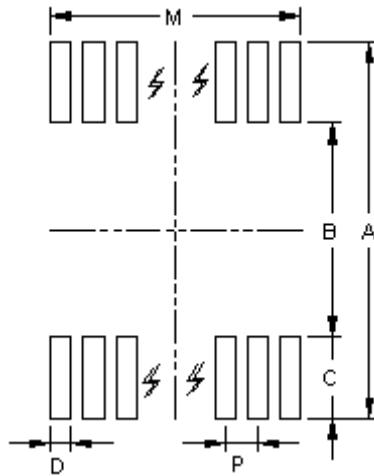
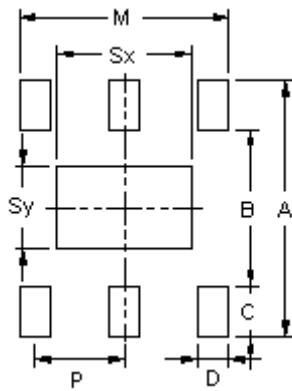
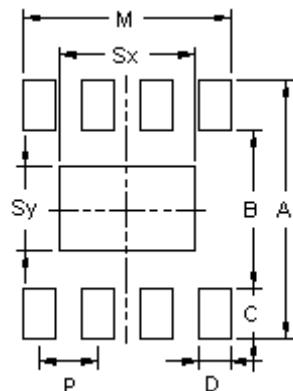
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	A	B	C	D	Sx	Sy	M	
SOP-8 (EP)	8	1.27	6.80	4.20	1.30	0.70	2.30	2.30	4.51	± 0.10
							3.40	2.40		
SOP-8	8	1.27	6.80	4.20	1.30	0.70	--	--	4.51	± 0.10
SOP-14	14	1.27	6.80	4.20	1.30	0.70	--	--	8.32	± 0.10
SOP-16	16	1.27	6.80	4.20	1.30	0.70	--	--	9.59	± 0.10
SOP-16 (300mil)	16	1.27	11.20	8.00	1.60	0.70	--	--	9.59	± 0.10

SOP-20 / SOP-24 / SOP-28 / SOP-32 (Body Width = 300mil)

SSOP-16

SSOP-28


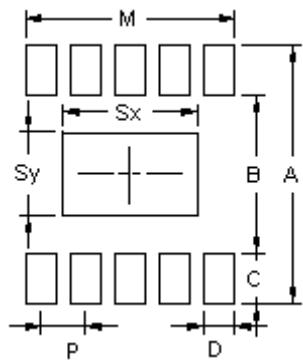
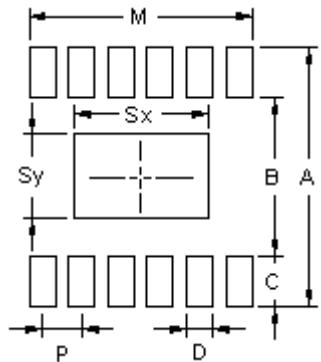
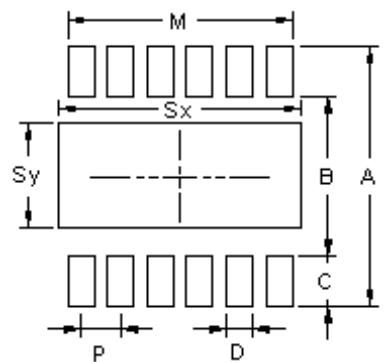
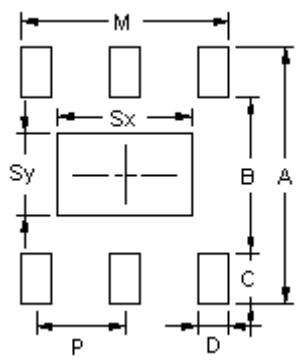
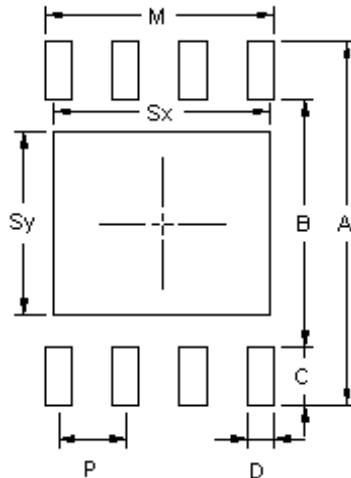
Package	Number of Pin	Footprint Dimension (mm)						Tolerance
		P	A	B	C	D	M	
SOP-20 (300mil)	20	1.27	11.20	8.00	1.60	0.70	12.13	± 0.10
SOP-24 (300mil)	24	1.27	11.20	8.00	1.60	0.70	14.67	± 0.10
SOP-28 (300mil)	28	1.27	11.20	8.00	1.60	0.70	17.21	± 0.10
SOP-32 (300mil)	32	1.27	11.20	8.00	1.60	0.70	19.75	± 0.10
SSOP-16	16	0.64	6.80	4.20	1.30	0.30	4.78	± 0.10
SSOP-28	28	0.64	6.80	4.20	1.30	0.30	8.62	± 0.10

TSSOP-8

TSSOP-14

TSSOP-16

TSSOP-16 (Exposed Pad)


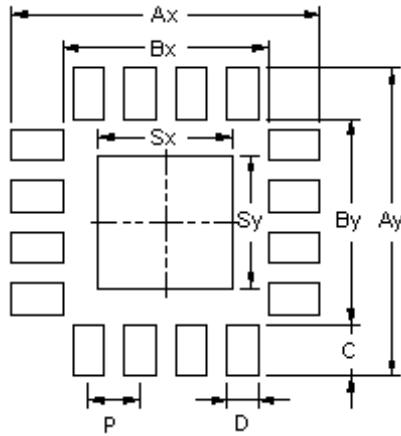
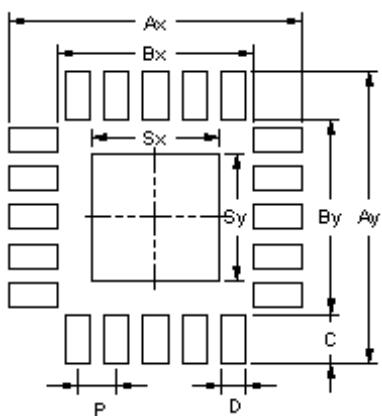
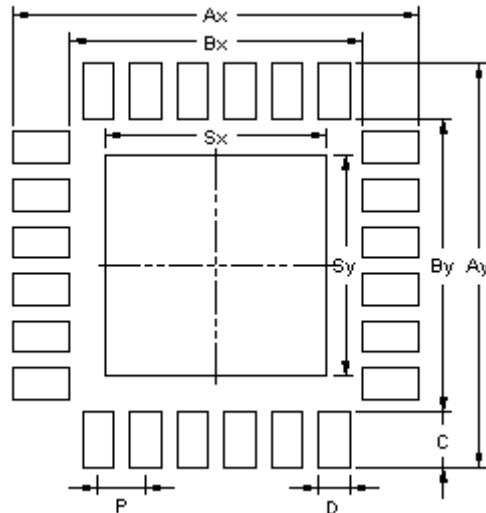
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	A	B	C	D	Sx	Sy	M	
TSSOP-8	8	0.65	7.00	5.00	1.00	0.35	--	--	2.30	± 0.10
TSSOP-14	14	0.65	7.00	5.00	1.00	0.35	--	--	4.25	± 0.10
TSSOP-16	16	0.65	7.00	5.00	1.00	0.35	--	--	4.90	± 0.10
TSSOP-16 (EP)	16	0.65	7.00	5.00	1.00	0.35	3.00	3.00	4.90	± 0.10

TSSOP-20 / TSSOP-24 / TSSOP-28 / TSSOP-32

V/W/X DFN-2x2-6L / V/W/X DFN-3x3-6L

V/W/X DFN-2x2-8L / V/W/X DFN-3x3-8L


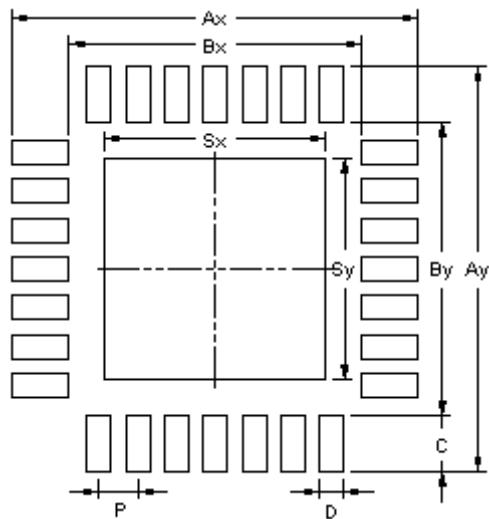
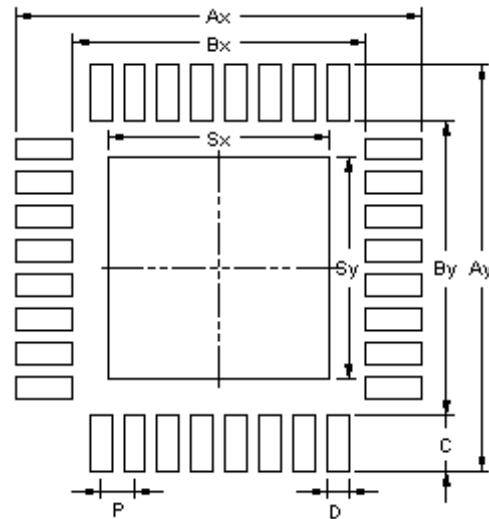
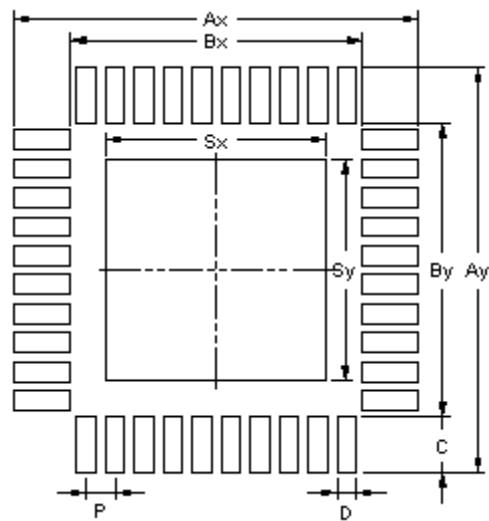
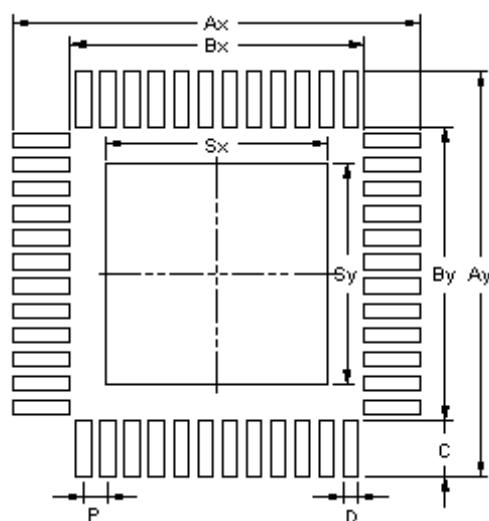
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	A	B	C	D	Sx	Sy	M	
TSSOP-20	20	0.65	7.00	5.00	1.00	0.35	--	--	6.20	± 0.10
TSSOP-24	24	0.65	7.00	5.00	1.00	0.35	--	--	7.50	± 0.10
TSSOP-28	28	0.65	7.00	5.00	1.00	0.35	--	--	8.80	± 0.10
TSSOP-32	32	0.65	7.00	5.00	1.00	0.35	--	--	10.10	± 0.10
V/W/X DFN 2x2-6L	6	0.65	2.80	1.20	0.80	0.35	1.40	0.70	1.65	± 0.050
V/W/X DFN 2x2-8L	8	0.50	2.80	1.20	0.80	0.30	1.30	0.70	1.80	± 0.030
V/W/X DFN 3x3-6L	6	0.95	3.80	2.10	0.85	0.50	2.40	1.40	2.40	± 0.050
V/W/X DFN 3x3-8L	8	0.65	3.80	2.10	0.85	0.30	2.30	1.40	2.25	± 0.050
V/W/X DFN 3x3-8E	8	0.50	3.80	2.10	0.85	0.30	2.30	1.40	1.80	± 0.030

V/W/X DFN-3x3-10L

V/W/X DFN-3x3-12L

V/W/X DFN-4x3-12L

WDFN-1.6x1.6-6L

V/W DFN-5x6-8L


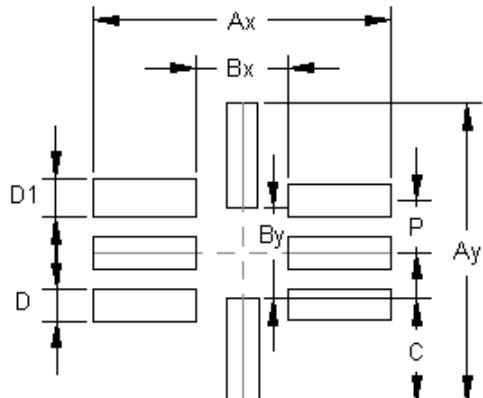
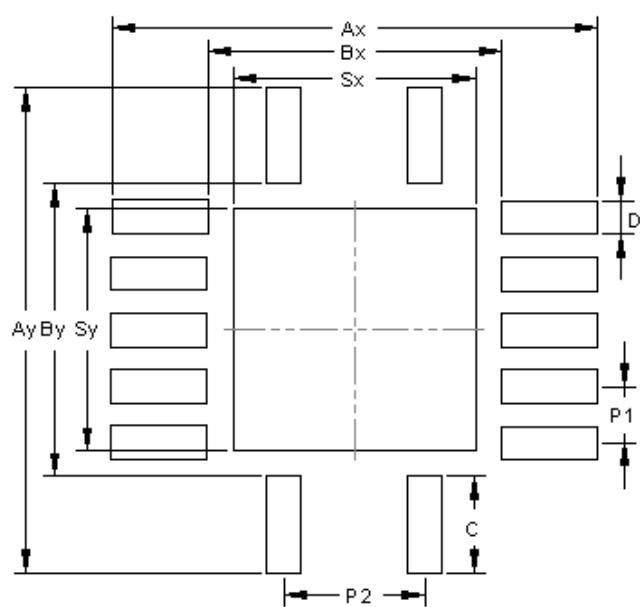
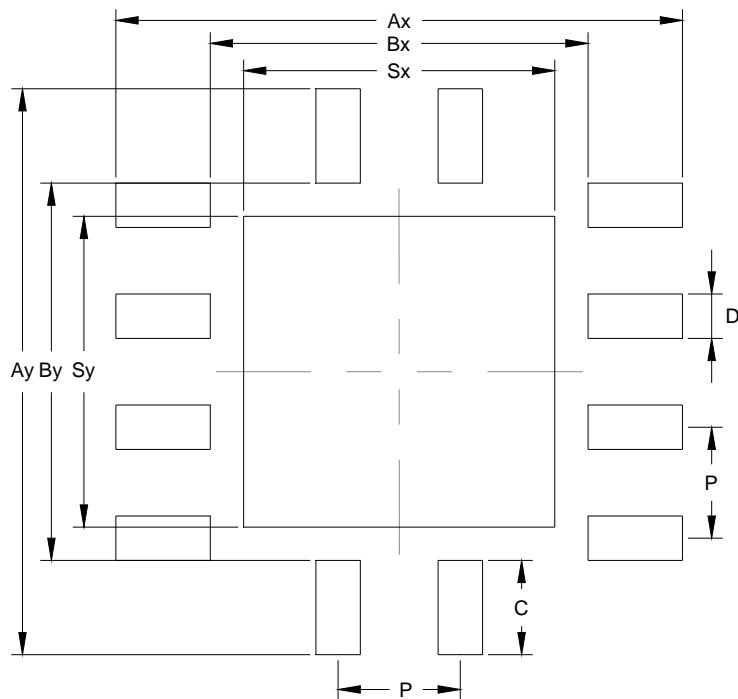
Package	Number of Pin	Footprint Dimension (mm)								Tolerance
		P	A	B	C	D	Sx	Sy	M	
V/W/X DFN 3x3-10L	10	0.50	3.80	2.10	0.85	0.30	2.50	1.50	2.30	±0.030
V/W/X DFN 3x3-12L	12	0.45	3.80	2.10	0.85	0.30	2.50	1.50	2.55	±0.030
V/W/X DFN 4x3-12L	12	0.50	3.80	2.10	0.85	0.30	3.20	1.60	2.80	±0.030
WDFN 1.6x1.6-6L	6	0.50	2.42	1.02	0.70	0.30	1.00	0.60	1.30	±0.030
V/W DFN 5x6-8L	8	1.27	6.90	4.70	1.10	0.50	4.10	3.50	4.31	±0.030

V/W/X QFN-3x3-16L / V/W/X QFN-4x4-16L / V/W QFN-5x5-16L

V/W/X QFN-4x4-20L

V/W/X QFN-4x4-24L / V/W QFN-5x5-24L


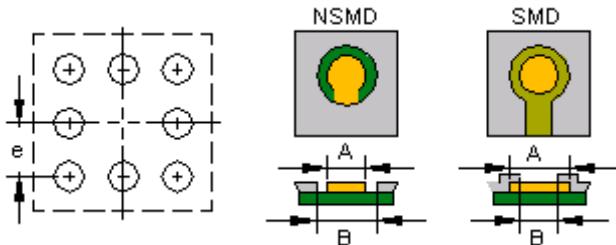
Package	Number of Pin	Footprint Dimension (mm)									Tolerance
		P	Ax	Ay	Bx	By	C	D	Sx	Sy	
V/W/X QFN 3x3-16L	16	0.50	3.80	3.80	2.10	2.10	0.85	0.30	1.50	1.50	± 0.030
V/W/X QFN 4x4-16L	16	0.65	5.00	5.00	2.80	2.80	1.10	0.35	2.10	2.10	± 0.050
V/W QFN 5x5-16L	16	0.80	6.00	6.00	3.80	3.80	1.10	0.35	3.10	3.10	± 0.050
V/W/X QFN 4x4-20L	20	0.50	4.80	4.80	3.10	3.10	0.85	0.30	2.20	2.20	± 0.030
V/W/X QFN 4x4-24L	24	0.50	4.80	4.80	3.10	3.10	0.85	0.30	2.60	2.60	± 0.030
V/W QFN 5x5-24L	24	0.65	5.80	5.80	4.10	4.10	0.85	0.35	3.10	3.10	± 0.050

V/W QFN-5x5-28L / V/W QFN-6x6-28L

V/W QFN-5x5-32L

V/W QFN-5x5-40L / V/W QFN-6x6-40L

V/W QFN-6x6-48L / V/W QFN-7x7-48L


Package	Number of Pin	Footprint Dimension (mm)									Tolerance
		P	Ax	Ay	Bx	By	C	D	Sx	Sy	
V/W QFN 5x5-28L	28	0.50	6.00	6.00	3.80	3.80	1.10	0.30	3.10	3.10	±0.030
V/W QFN 6x6-28L	28	0.65	7.00	7.00	4.70	4.70	1.15	0.35	3.80	3.80	±0.050
V/W QFN 5x5-32L	32	0.50	5.80	5.80	4.10	4.10	0.85	0.30	3.40	3.40	±0.030
V/W QFN 5x5-40L	40	0.40	6.00	6.00	4.10	4.10	0.95	0.25	3.40	3.40	±0.030
V/W QFN 6x6-40L	40	0.50	6.80	6.80	5.10	5.10	0.85	0.30	4.20	4.20	±0.030
V/W QFN 6x6-48L	48	0.40	6.80	6.80	5.10	5.10	0.85	0.20	4.40	4.40	±0.030
V/W QFN 7x7-48L	48	0.50	7.80	7.80	6.10	6.10	0.85	0.30	5.25	5.25	±0.030

V/W/X QFN-1.6x1.6-8L

V/W QFN-3.5x3.5-14L

V/W QFN-5x5-12L


Package	Number of Pin	Footprint Dimension (mm)												Tolerance
		P	P1	P2	Ax	Ay	Bx	By	C	D	D1	Sx	Sy	
V/W/X QFN 1.6x1.6-8L	8	0.40	--	--	2.30	2.30	0.70	0.70	0.80	0.25	0.30	--	--	±0.030
V/W QFN 3.5x3.5-14L	14	--	0.5	1.25	4.30	4.30	2.60	2.60	0.85	0.30	--	2.15	2.15	±0.030
V/W QFN 5x5-12L	12	1.25	--	--	5.80	5.80	3.90	3.90	0.95	0.60	--	3.45	3.45	±0.050

WL-CSP-1.5x1.5-8B

Package	Number of Pin	Type	Footprint Dimension (mm)		Tolerance	
			e	A	B	
WL-CSP-1.5x1.5-8B	8	NSMD	0.5	0.275	0.375	±0.025
		SMD	0.5	0.375	0.275	±0.025