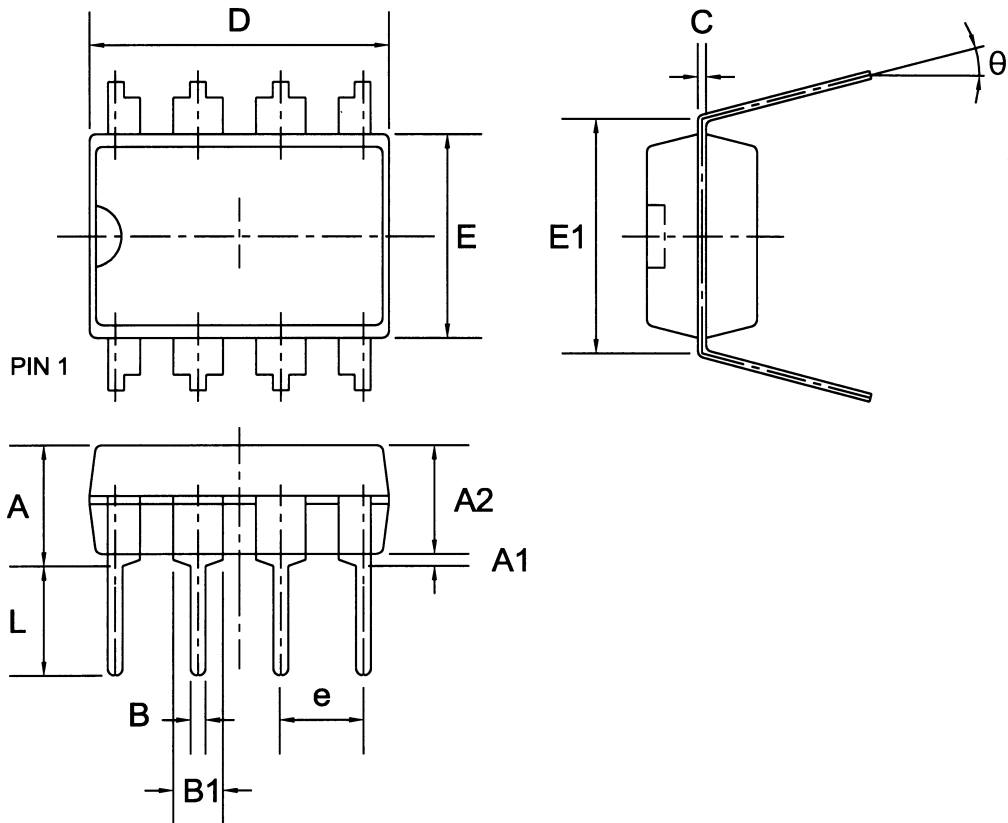


DIMENSION

DIP-8 DIMENSION (FIG. NO. DIM-DIP8-0103-B)

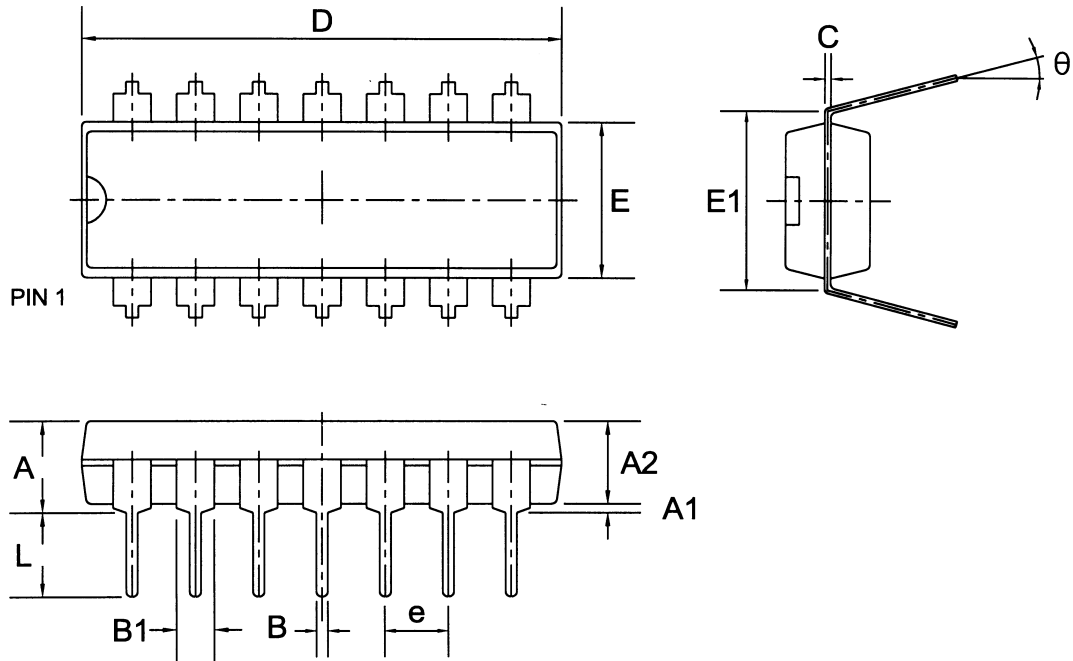


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	—	—	4.31	—	—	0.170
A1	0.38	—	—	0.015	—	—
A2	3.15	3.40	3.65	0.124	0.134	0.144
B	0.38	0.46	0.51	0.015	0.018	0.020
B1	1.27	1.52	1.77	0.050	0.060	0.070
C	0.20	0.25	0.30	0.008	0.010	0.012
D	8.95	9.20	9.45	0.352	0.362	0.372
E	6.15	6.40	6.65	0.242	0.252	0.262
E1	—	7.62	—	—	0.300	—
e	—	2.54	—	—	0.100	—
L	3.00	3.30	3.65	0.118	0.130	0.142
θ	0°	—	15°	0°	—	15°

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DIMENSION

DIP-14 DIMENSION (FIG. NO. DIM-DIP14-0103-B)

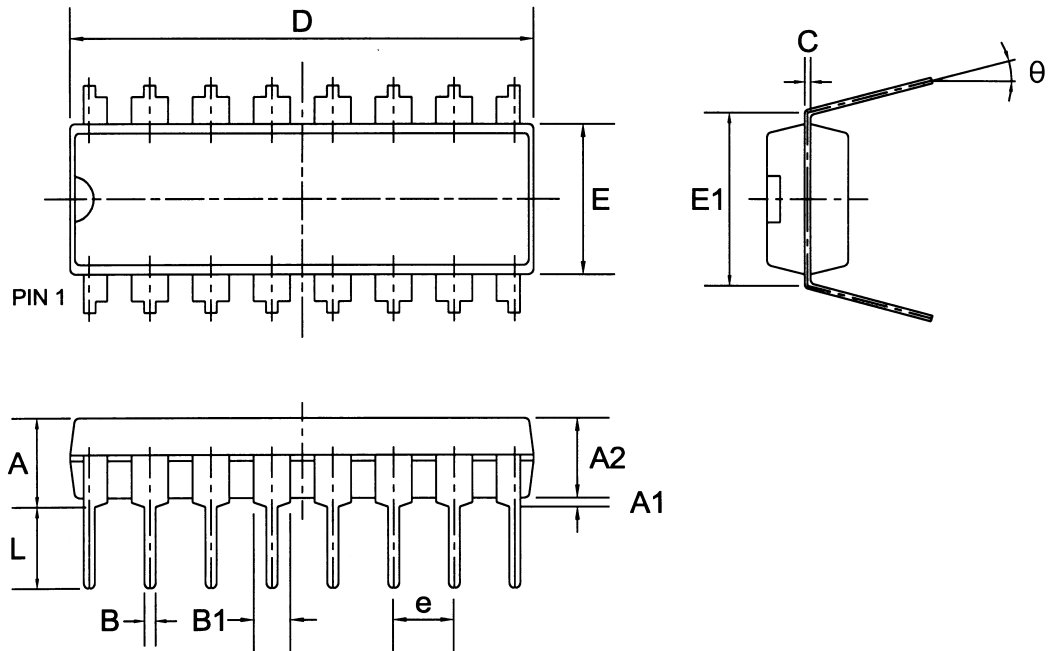


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	—	—	4.31	—	—	0.170
A1	0.38	—	—	0.015	—	—
A2	3.15	3.40	3.65	0.124	0.134	0.144
B	—	0.46	—	—	0.018	—
B1	—	1.52	—	—	0.060	—
C	—	0.25	—	—	0.010	—
D	19.00	19.30	19.60	0.748	0.760	0.772
E	6.20	6.40	6.60	0.244	0.252	0.260
E1	—	7.62	—	—	0.300	—
e	—	2.54	—	—	0.100	—
L	3.00	3.30	3.60	0.118	0.130	0.142
θ	0°	—	15°	0°	—	15°

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DIMENSION

DIP-16 DIMENSION (FIG. NO. DIM-DIP16-0103-B)

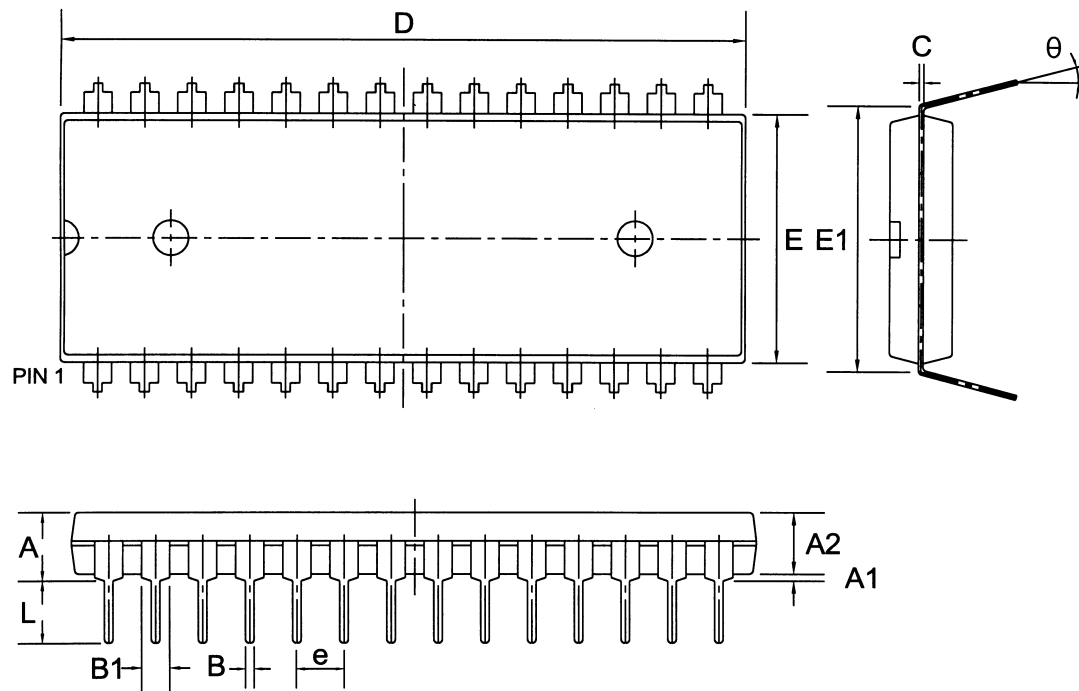


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	—	—	4.31	—	—	0.170
A1	0.38	—	—	0.015	—	—
A2	3.15	3.40	3.65	0.124	0.134	0.144
B	0.38	0.46	0.51	0.015	0.018	0.020
B1	1.27	1.52	1.77	0.050	0.060	0.070
C	0.20	0.25	0.30	0.008	0.010	0.012
D	19.00	19.30	19.60	0.748	0.760	0.772
E	6.15	6.40	6.65	0.242	0.252	0.262
E1	—	7.62	—	—	0.300	—
e	—	2.54	—	—	0.100	—
L	3.00	3.30	3.60	0.118	0.130	0.142
θ	0°	—	15°	0°	—	15°

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DIMENSION

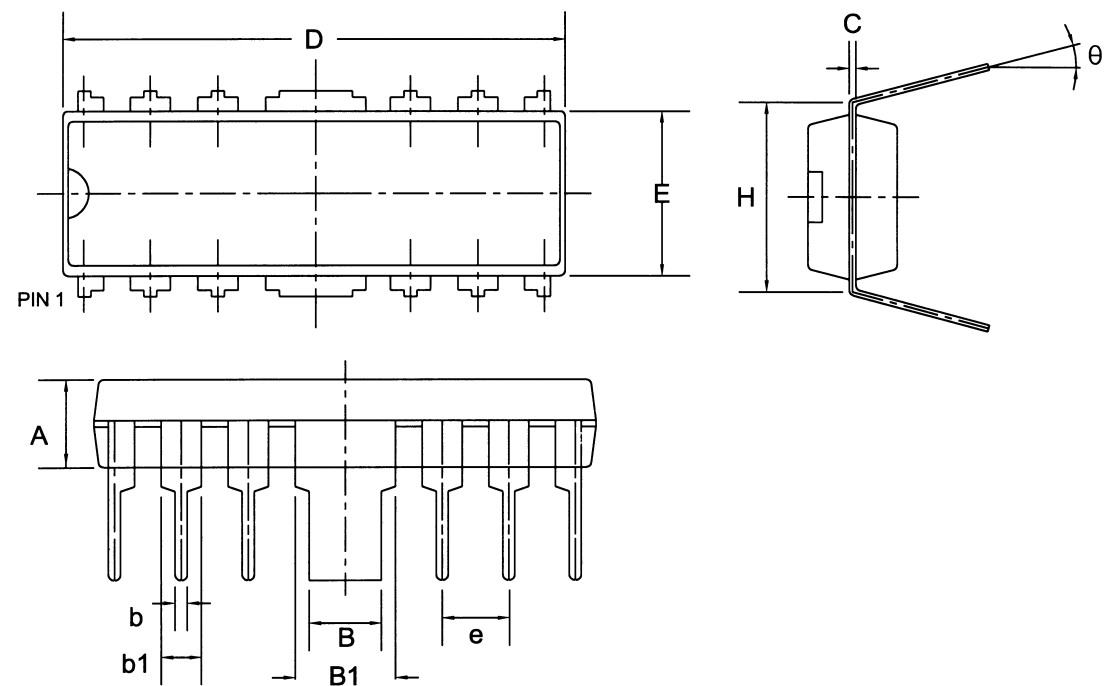
DIP-28 DIMENSION (FIG. NO. DIM-DIP28-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	—	—	5.34	—	—	0.210
A1	0.38	—	—	0.015	—	—
A2	3.65	3.85	4.05	0.144	0.152	0.159
B	—	0.46	—	—	0.018	—
B1	—	1.52	—	—	0.060	—
C	—	0.25	—	—	0.010	—
D	36.80	37.10	37.40	1.449	1.461	1.472
E	13.40	13.70	14.00	0.528	0.539	0.551
E1	—	15.24	—	—	0.600	—
e	—	2.54	—	—	0.100	—
L	3.00	3.30	3.60	0.118	0.130	0.142
θ	0°	—	15°	0°	—	15°

DIMENSION

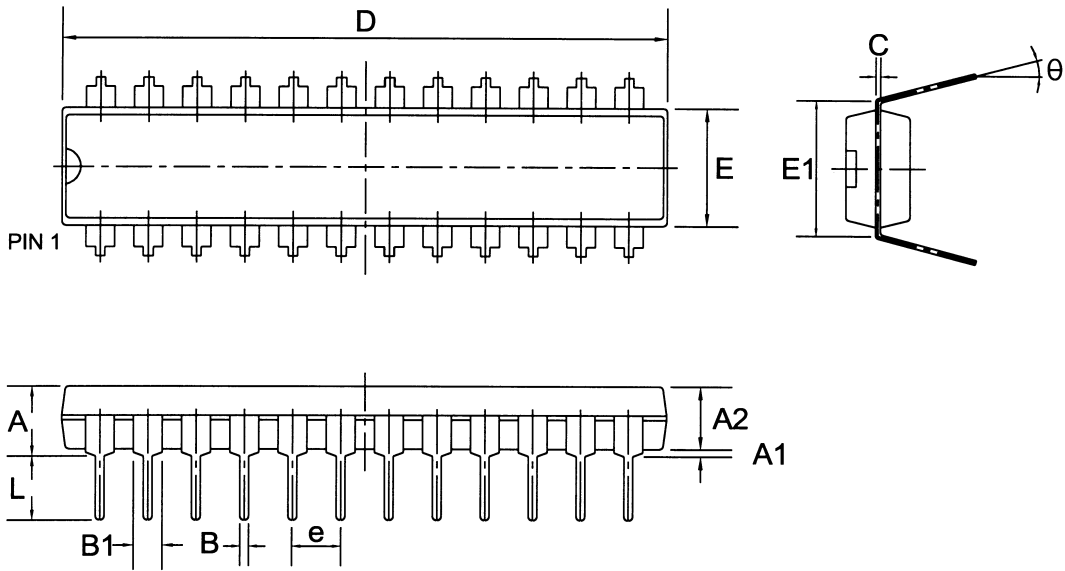
DIP-12H DIMENSION (FIG. NO. DIM-DIP12H-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.15	3.40	3.65	0.124	0.134	0.144
B	—	3.00	—	—	0.118	—
B1	—	4.06	—	—	0.160	—
b	—	0.46	—	—	0.018	—
b1	—	1.52	—	—	0.060	—
C	—	0.25	—	—	0.010	—
D	18.90	19.00	19.10	0.744	0.748	0.752
E	6.20	6.30	6.40	0.244	0.248	0.252
H	7.37	7.62	7.87	0.290	0.300	0.310
e	—	2.54	—	—	0.100	—
θ	0°	—	15°	0°	—	15°

DIMENSION

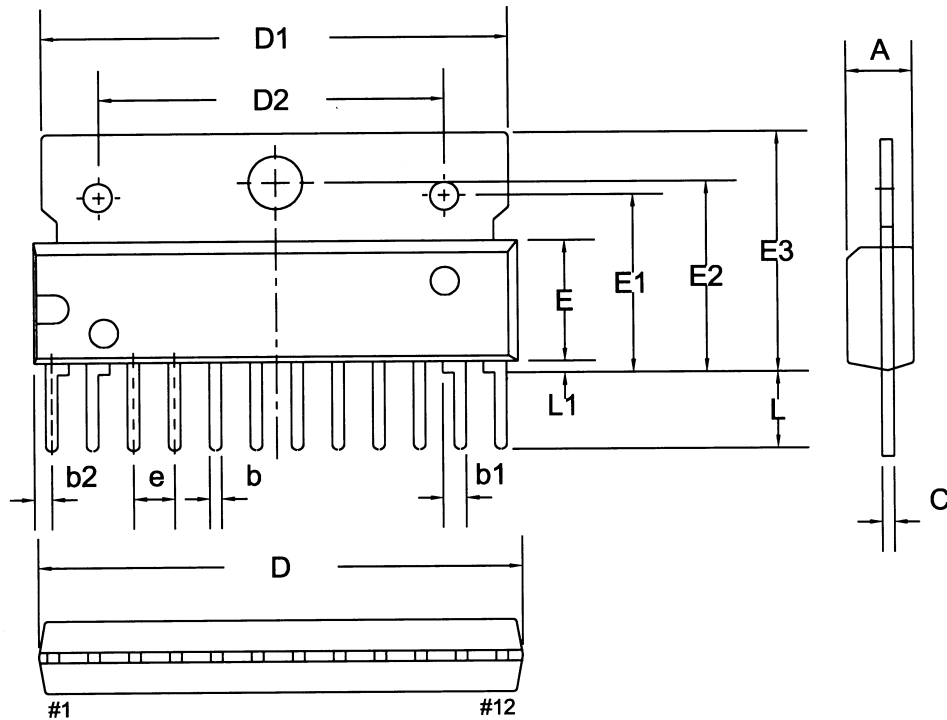
SDIP-24 DIMENSION (FIG. NO. DIM-SDIP24-0103-A)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	—	—	4.31	—	—	0.170
A1	0.38	—	—	0.015	—	—
A2	3.15	3.40	3.65	0.124	0.134	0.144
B	—	0.43	—	—	0.017	—
B1	—	1.05	—	—	0.041	—
C	—	0.25	—	—	0.010	—
D	22.82	23.12	23.32	0.898	0.910	0.918
E	6.15	6.40	6.65	0.242	0.252	0.262
E1	—	7.62	—	—	0.300	—
e	—	1.78	—	—	0.100	—
L	3.00	3.30	3.60	0.118	0.130	0.142
θ	0°	—	15°	0°	—	15°

DIMENSION

FSIP-12H DIMENSION (FIG. NO. DIM-FSIP12-0103-B)

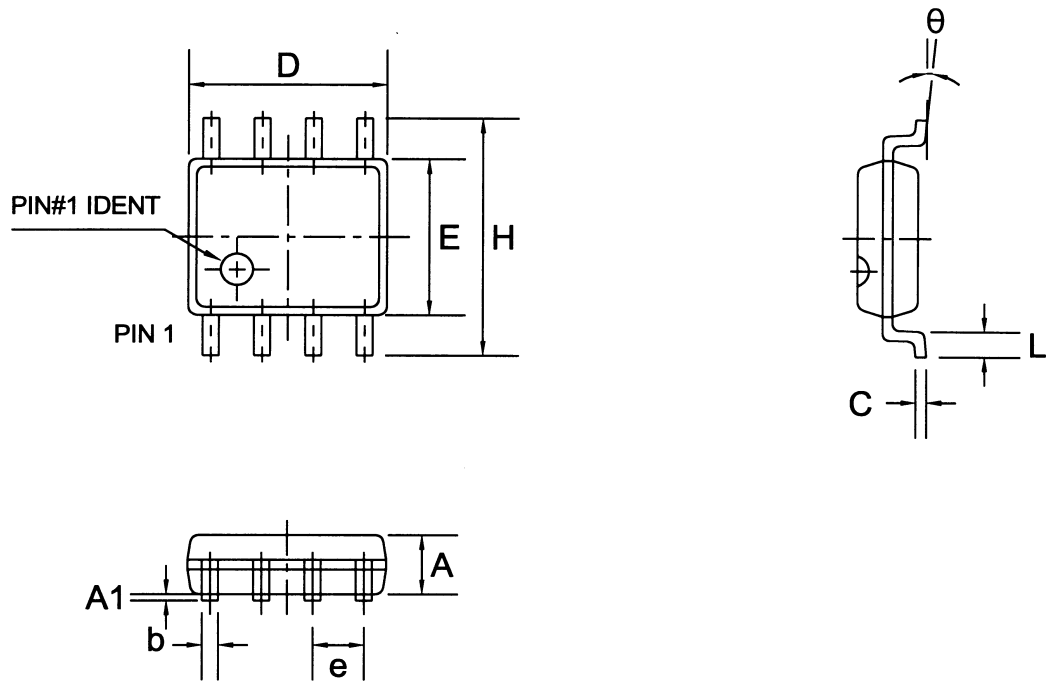


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.80	4.00	4.20	0.150	0.157	0.165
b	0.40	0.50	0.60	0.016	0.020	0.024
b1	0.85	0.95	1.05	0.033	0.037	0.041
b2	—	0.83	—	—	0.033	—
C	0.35	0.40	0.50	0.014	0.016	0.020
D	29.40	29.60	29.80	1.157	1.165	1.173
D1	27.80	28.00	28.20	1.094	1.102	1.110
D2	21.80	22.00	22.20	0.858	0.866	0.874
E	7.80	8.00	8.20	0.307	0.315	0.323
E1	11.30	11.50	11.70	0.445	0.453	0.461
E2	12.30	12.50	12.70	0.484	0.492	0.500
E3	—	—	15.20	—	—	0.598
e	—	2.54	—	—	0.100	—
L	5.20	5.50	5.80	0.205	0.217	0.228
L1	0.30	0.50	0.70	0.012	0.020	0.028

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DIMENSION

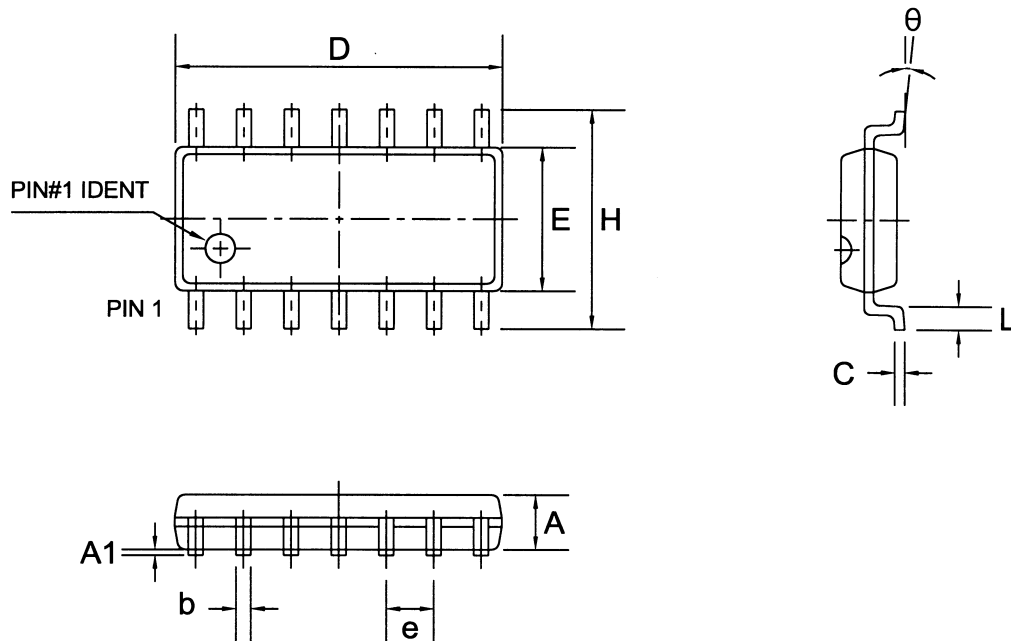
SOP-8 DIMENSION (FIG. NO. DIM-SOP8-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.30	1.50	1.70	0.051	0.059	0.067
A1	0.06	0.16	0.26	0.002	0.006	0.010
b	0.30	0.40	0.55	0.012	0.016	0.022
C	0.15	0.25	0.35	0.006	0.010	0.014
D	4.72	4.92	5.12	0.186	0.194	0.202
E	3.75	3.95	4.15	0.148	0.156	0.163
e	—	1.27	—	—	0.050	—
H	5.70	6.00	6.30	0.224	0.236	0.248
L	0.45	0.65	0.85	0.018	0.026	0.033
θ	0°	—	8°	0°	—	8°

DIMENSION

SOP-14 DIMENSION (FIG. NO. DIM-SOP14-0103-B)

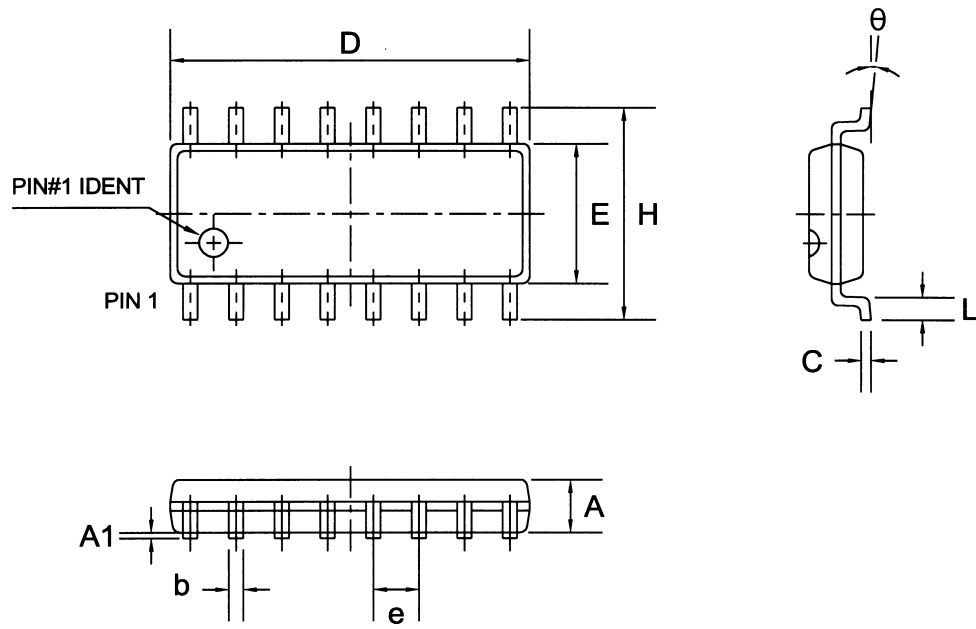


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.30	1.50	1.70	0.051	0.059	0.067
A1	0.08	0.16	0.24	0.003	0.006	0.009
b	—	0.40	—	—	0.016	—
C	—	0.25	—	—	0.010	—
D	8.25	8.55	8.85	0.325	0.337	0.348
E	3.75	3.95	4.15	0.148	0.156	0.163
e	—	1.27	—	—	0.050	—
H	5.70	6.00	6.30	0.224	0.236	0.248
L	0.45	0.65	0.85	0.018	0.026	0.033
θ	0°	—	8°	0°	—	8°

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DIMENSION

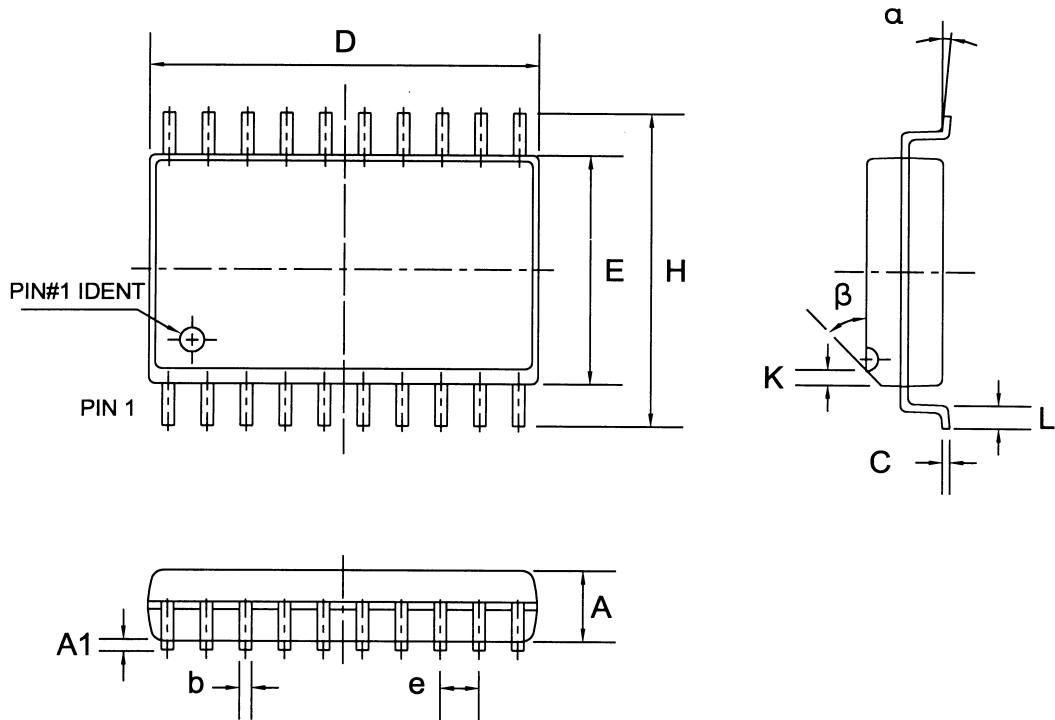
SOP-16 DIMENSION (FIG. NO. DIM-SOP16-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.30	1.50	1.70	0.051	0.059	0.067
A1	0.06	0.16	0.26	0.002	0.006	0.010
b	0.30	0.40	0.55	0.012	0.016	0.022
C	0.15	0.25	0.35	0.006	0.010	0.014
D	9.70	10.00	10.30	0.382	0.394	0.406
E	3.75	3.95	4.15	0.148	0.156	0.163
e	—	1.27	—	—	0.050	—
H	5.70	6.00	6.30	0.224	0.236	0.248
L	0.45	0.65	0.85	0.018	0.026	0.033
θ	0°	—	8°	0°	—	8°

DIMENSION

SOP-20 DIMENSION (FIG. NO. DIM-SOP20-0103-A)

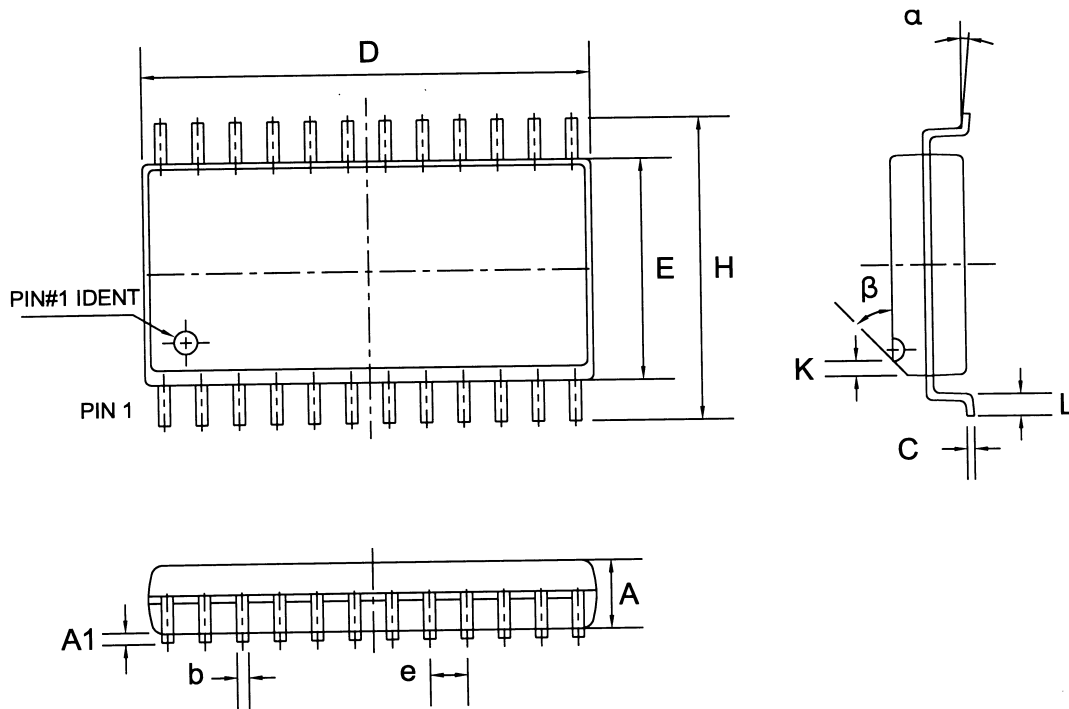


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.15	2.35	2.55	0.085	0.093	0.100
A1	0.05	0.15	0.25	0.002	0.006	0.010
b	—	0.40	—	—	0.016	—
C	—	0.25	—	—	0.010	—
D	12.40	12.70	13.00	0.488	0.500	0.512
E	7.40	7.65	7.90	0.291	0.301	0.311
e	—	1.27	—	—	0.050	—
H	10.15	10.45	10.75	0.400	0.411	0.423
K	—	0.50	—	—	0.020	—
L	0.60	0.80	1.00	0.024	0.031	0.039
α	0°	—	8°	0°	—	8°
β	—	45°	—	—	45°	—

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DIMENSION

SOP-24 DIMENSION (FIG. NO. DIM-SOP24-0103-A)

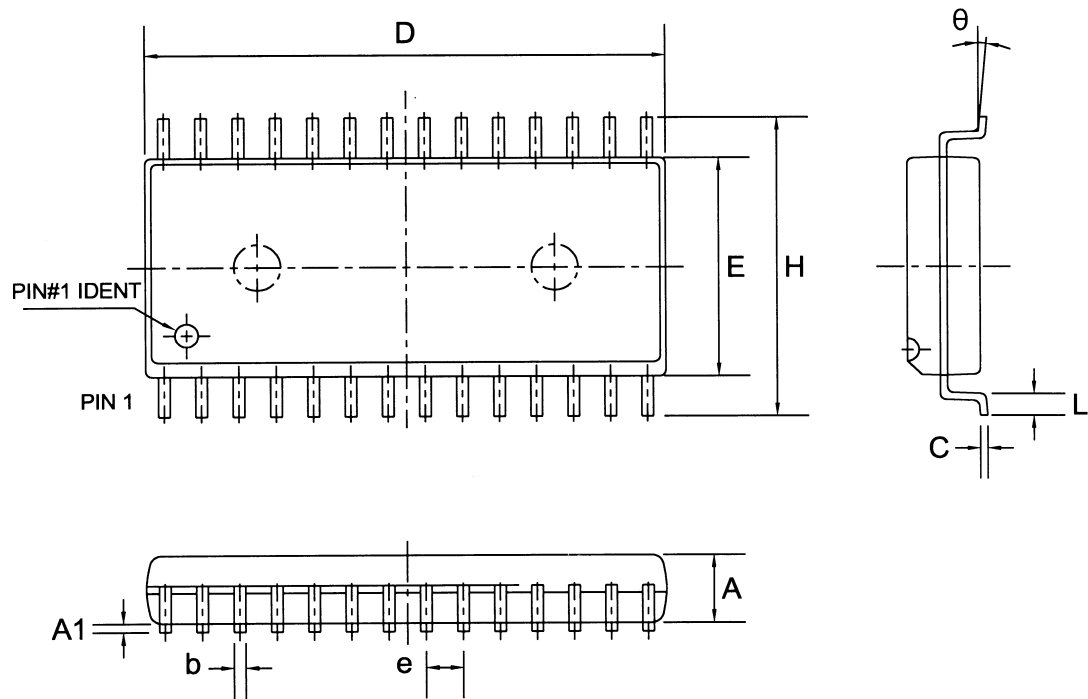


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.35	2.50	2.65	0.093	0.098	0.104
A1	0.10	0.20	0.30	0.004	0.008	0.012
b	—	0.40	—	—	0.016	—
C	—	0.25	—	—	0.010	—
D	15.10	15.40	15.70	0.594	0.606	0.618
E	7.35	7.50	7.65	0.289	0.295	0.301
e	—	1.27	—	—	0.050	—
H	10.15	10.45	10.75	0.400	0.411	0.423
K	—	0.50	—	—	0.020	—
L	0.60	0.80	1.00	0.024	0.031	0.039
α	0°	—	8°	0°	—	8°
β	—	45°	—	—	45°	—

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DIMENSION

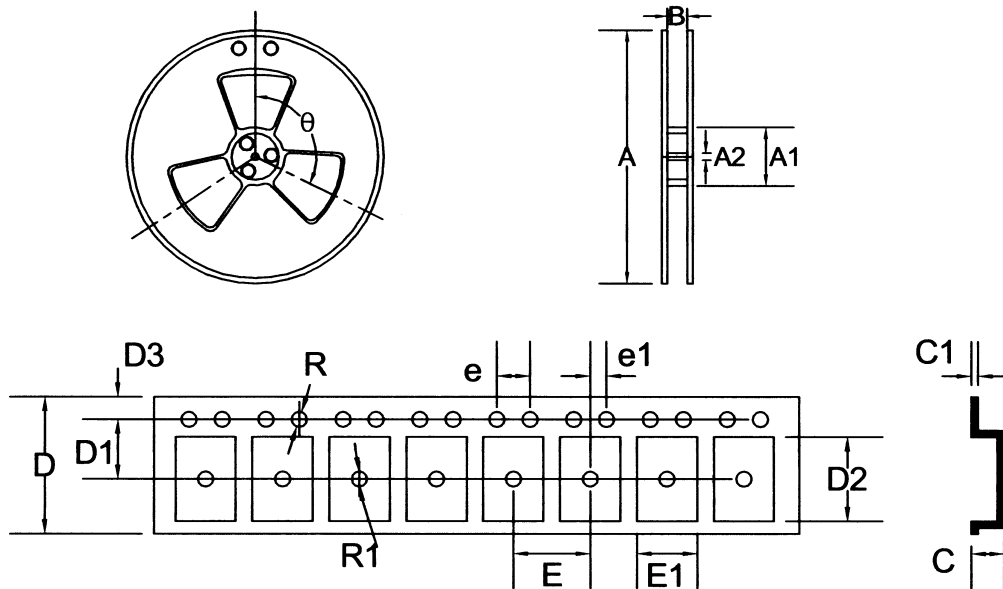
SOP-28 DIMENSION (FIG. NO. DIM-SOP28-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.15	2.35	2.55	0.085	0.093	0.100
A1	0.05	0.15	0.25	0.002	0.006	0.010
b	—	0.40	—	—	0.016	—
C	—	0.25	—	—	0.010	—
D	17.40	17.70	18.00	0.685	0.697	0.709
E	7.40	7.65	7.90	0.291	0.301	0.311
e	—	1.27	—	—	0.050	—
H	10.15	10.45	10.75	0.400	0.411	0.423
L	0.60	0.80	1.00	0.024	0.031	0.039
θ	0°	—	8°	0°	—	8°

DIMENSION

TAPING SOP-16 DIMENSION (FIG. NO. DIM-TAPING-SOP16-0104-B)

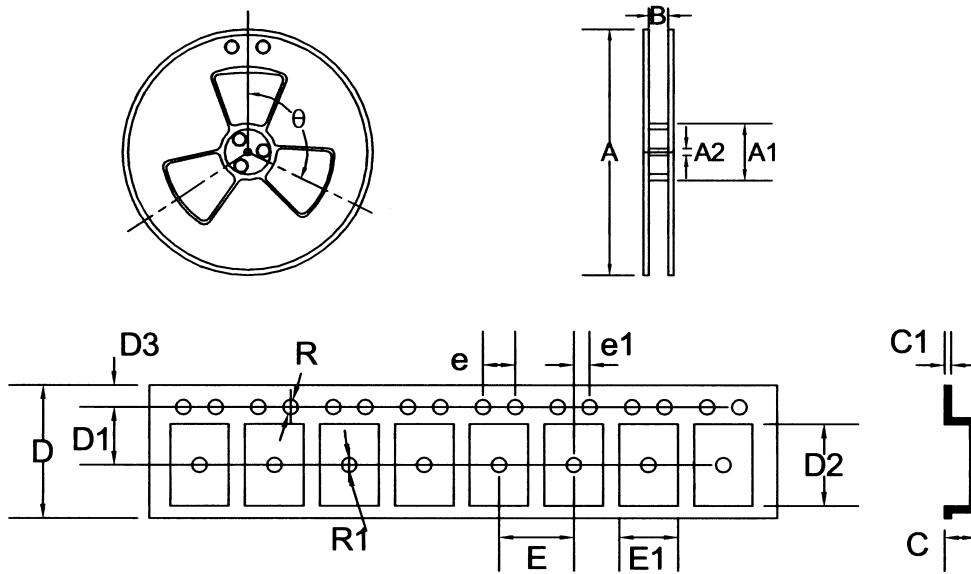


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	327.00	330.00	333.00	12.874	12.992	13.110
A1	99.00	100.00	101.00	3.898	3.937	3.976
A2	13.30	13.50	13.70	0.524	0.531	0.539
B	16.20	16.50	16.80	0.638	0.650	0.661
C	2.00	2.10	2.20	0.079	0.083	0.087
C1	0.25	0.30	0.35	0.010	0.012	0.014
D	15.70	16.00	16.30	0.618	0.630	0.642
D1	7.40	7.50	7.60	0.291	0.295	0.299
D2	10.20	10.30	10.40	0.402	0.406	0.409
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	6.40	6.50	6.60	0.252	0.256	0.260
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.75	0.057	0.059	0.069
θ	—	120°	—	—	120°	—

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DIMENSION

TAPING SOP-14 DIMENSION (FIG. NO. DIM-TAPING-SOP16-0104-B)

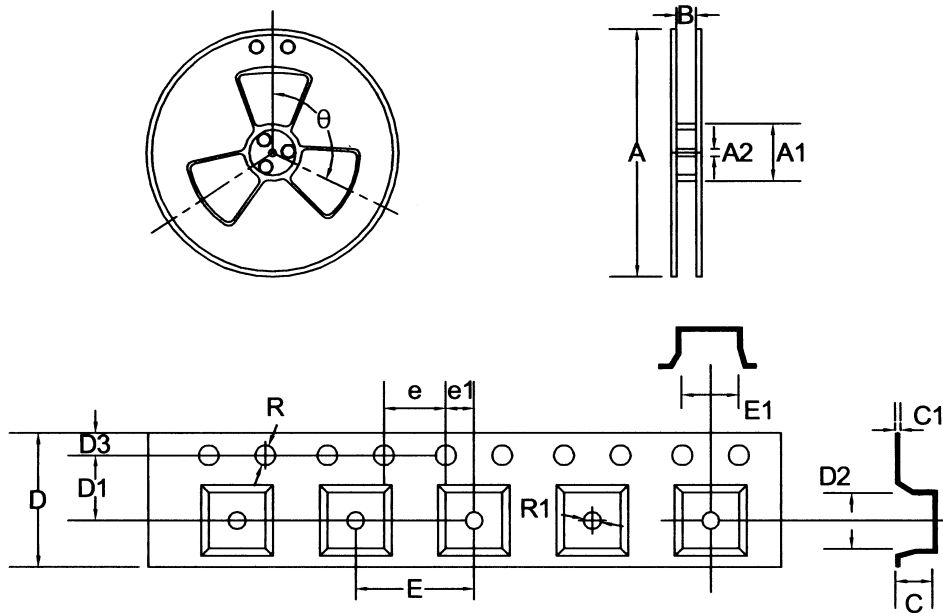


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	327.00	330.00	333.00	12.874	12.992	13.110
A1	99.00	100.00	101.00	3.898	3.937	3.976
A2	13.30	13.50	13.70	0.524	0.531	0.539
B	16.20	16.50	16.80	0.638	0.650	0.661
C	2.00	2.10	2.20	0.079	0.083	0.087
C1	0.25	0.30	0.35	0.010	0.012	0.014
D	15.70	16.00	16.30	0.618	0.630	0.642
D1	7.40	7.50	7.60	0.291	0.295	0.299
D2	10.20	10.30	10.40	0.402	0.406	0.409
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	6.40	6.50	6.60	0.252	0.256	0.260
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.75	0.057	0.059	0.069
θ	—	120°	—	—	120°	—

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DIMENSION

TAPING SOP-8 DIMENSION (FIG. NO. DIM-TAPING-SOP8-0104-B)

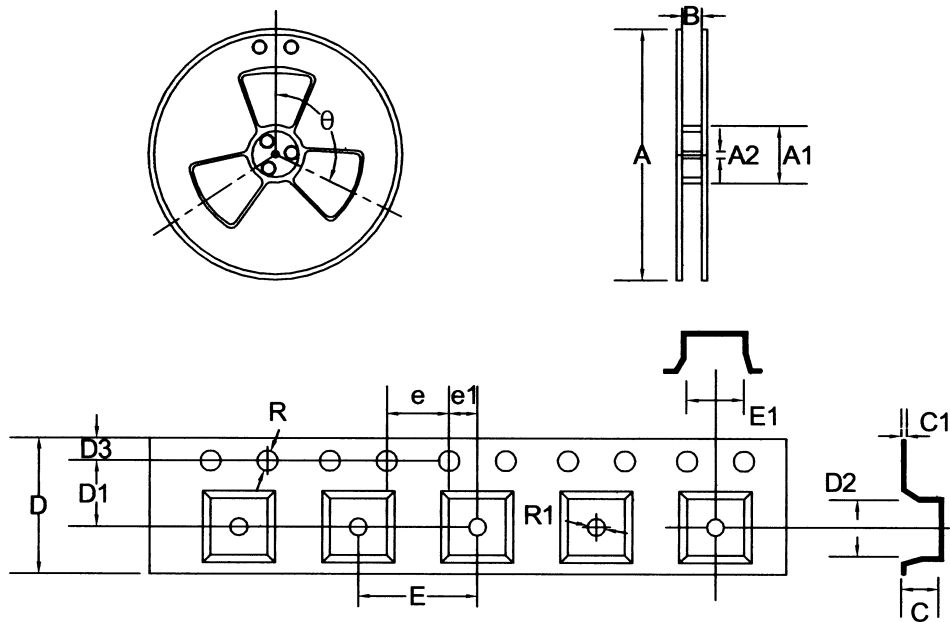


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	327.00	330.00	333.00	12.874	12.992	13.110
A1	99.00	100.00	101.00	3.898	3.937	3.976
A2	13.30	13.50	13.70	0.524	0.531	0.539
B	12.20	12.50	12.80	0.480	0.492	0.504
C	2.01	2.11	2.21	0.079	0.083	0.087
C1	0.19	0.29	0.39	0.007	0.011	0.015
D	11.70	12.00	12.30	0.461	0.472	0.484
D1	5.45	5.50	5.55	0.215	0.217	0.219
D2	5.11	5.21	5.31	0.201	0.205	0.209
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	6.30	6.40	6.50	0.248	0.252	0.256
e	3.90	4.00	4.10	0.154	0.157	0.161
10e	39.80	40.00	40.20	1.567	1.575	1.583
e1	1.95	2.00	2.05	0.077	0.079	0.081
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.75	0.057	0.059	0.069
θ	—	120°	—	—	120°	—

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DIMENSION

TAPING SOP-28 DIMENSION (FIG. NO. DIM-TAPING-SOP28-0104-B)

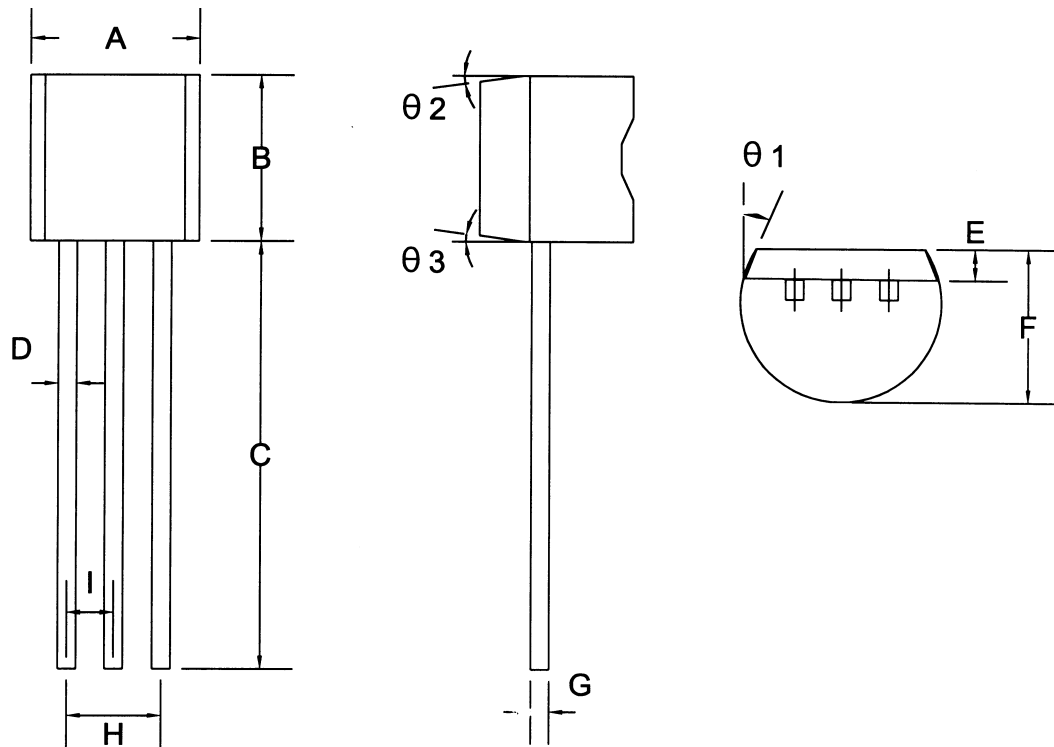


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	327.00	330.00	333.00	12.874	12.992	13.110
A1	99.00	100.00	101.00	3.898	3.937	3.976
A2	13.30	13.50	13.70	0.524	0.531	0.539
B	24.20	24.50	24.80	0.953	0.965	0.976
C	2.87	2.97	3.07	0.113	0.117	0.121
C1	0.25	0.35	0.45	0.010	0.014	0.018
D	23.70	24.00	24.30	0.933	0.945	0.957
D1	11.40	11.50	11.60	0.449	0.453	0.457
D2	18.24	18.34	18.44	0.718	0.722	0.726
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	11.90	12.00	12.10	0.469	0.472	0.476
E1	10.75	10.85	10.95	0.423	0.427	0.431
e	3.90	4.00	4.10	0.154	0.157	0.161
10e	39.80	40.00	40.20	1.567	1.575	1.583
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.75	0.057	0.059	0.069
θ	—	120°	—	—	120°	—

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DIMENSION

TO-92 DIMENSION (FIG. NO. DIM-TO92-0104-B)

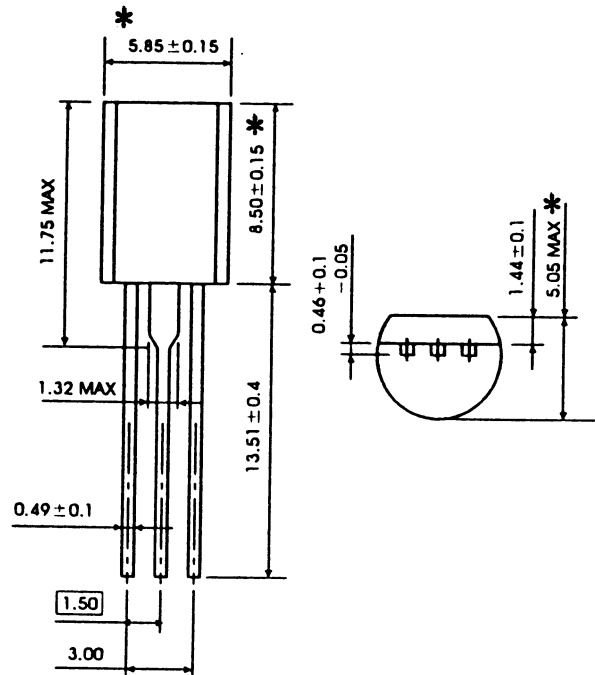


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.33	4.58	4.83	0.170	0.180	0.190
B	4.33	4.58	4.83	0.170	0.180	0.190
C	14.07	14.47	14.87	0.554	0.570	0.585
D	0.34	0.44	0.54	0.013	0.017	0.021
E	0.92	1.02	1.12	0.036	0.040	0.044
F	3.36	3.56	3.76	0.132	0.140	0.148
G	0.34	0.44	0.54	0.013	0.017	0.021
H	2.42	2.54	2.66	0.095	0.100	0.105
I	1.15	1.27	1.39	0.045	0.050	0.055
θ 1	—	5°	—	—	5°	—
θ 2	—	2°	—	—	2°	—
θ 3	—	2°	—	—	2°	—

UTC UNISONIC TECHNOLOGIES CO., LTD.

DIMENSION

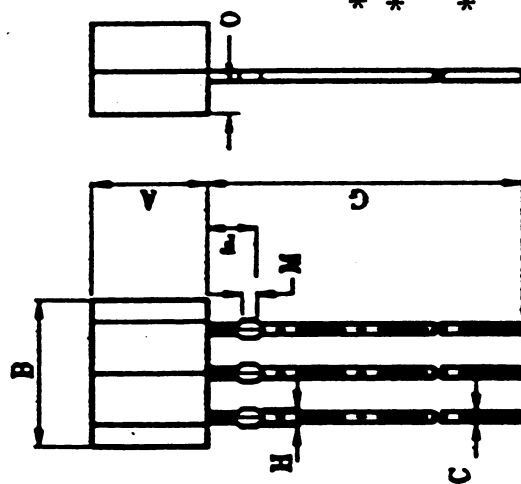
TO-92L DIMENSION (FIG. NO. DIM-TO92L-0002-A)



unit:mm

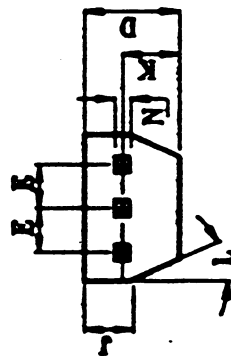
DIMENSION

TO-92M DIMENSION (FIG. NO. DIM-TO92M-0002-A)



DIM	MILLIMETERS
A	3.20 MAX
B	4.30 MAX
C	0.55 MAX
D	2.40±0.16
E	1.27
F	2.30
G	14.00±0.50
H	0.60 MAX
J	1.05
K	1.45
L	25°
N	0.80
N	0.56 MAX
O	0.75

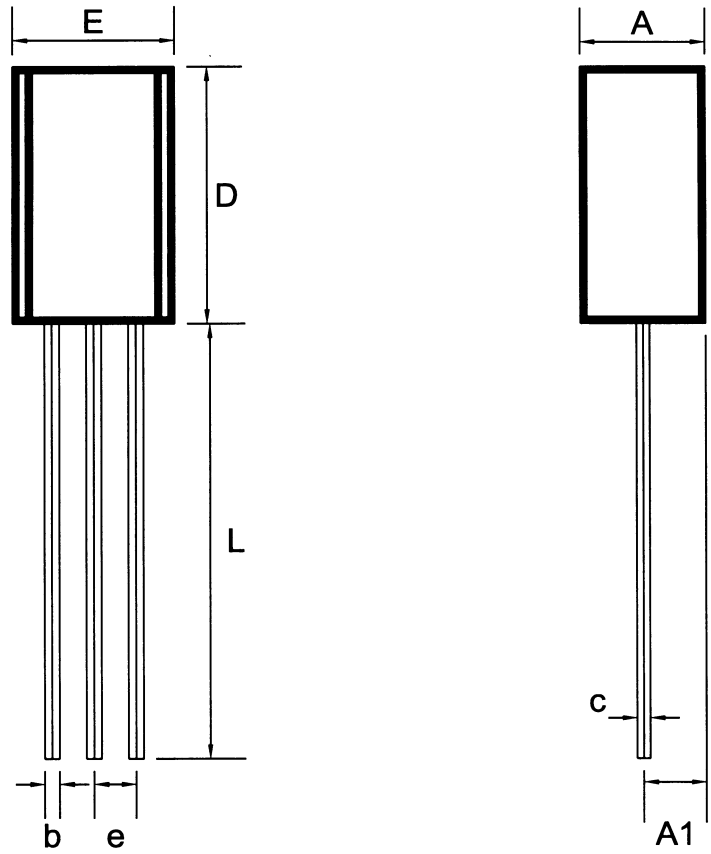
* * *



unit : mm

DIMENSION

TO-92NL DIMENSION (FIG. NO. DIM-TO92NL-0103-B)

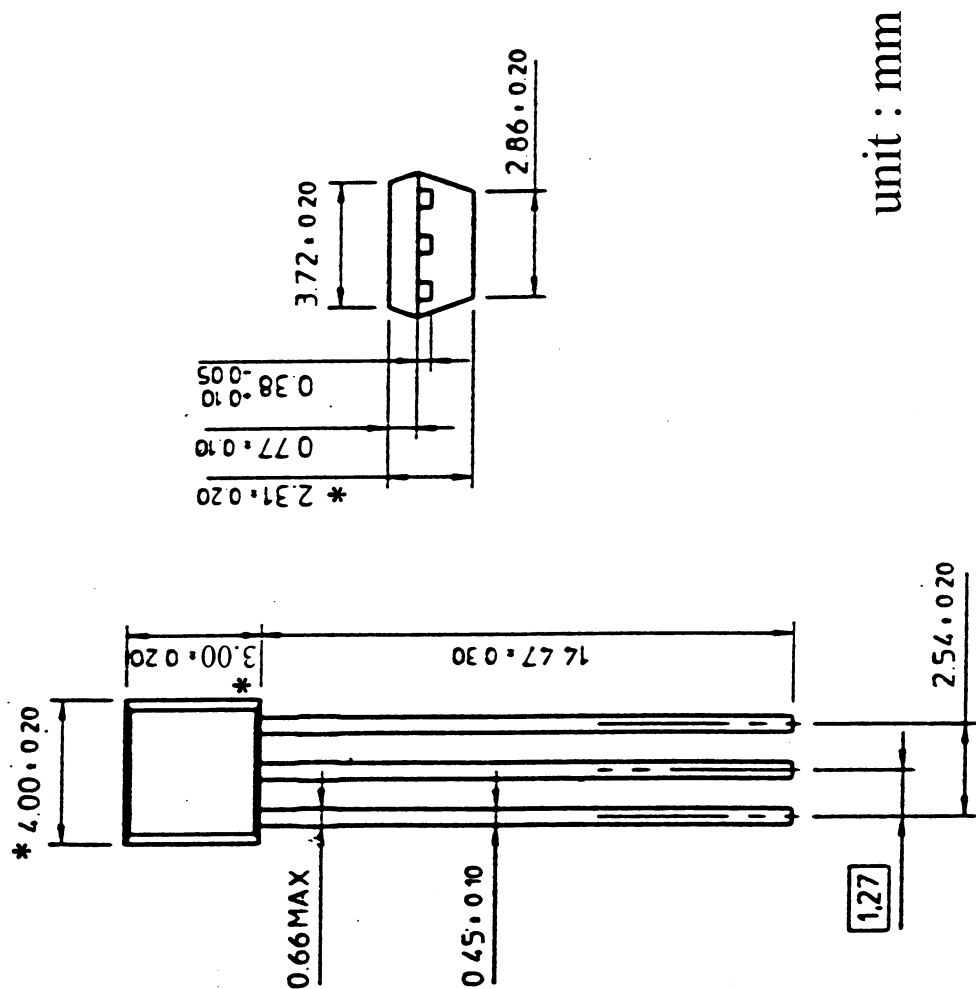


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.60	3.80	4.00	0.142	0.150	0.157
A1	1.30	1.40	1.50	0.051	0.055	0.059
b	—	0.45	—	—	0.018	—
c	—	0.40	—	—	0.016	—
D	7.85	8.00	8.15	0.309	0.315	0.321
E	4.75	4.90	5.05	0.187	0.193	0.199
e	—	1.27	—	—	0.050	—
L	13.10	13.50	13.90	0.516	0.531	0.547

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DIMENSION

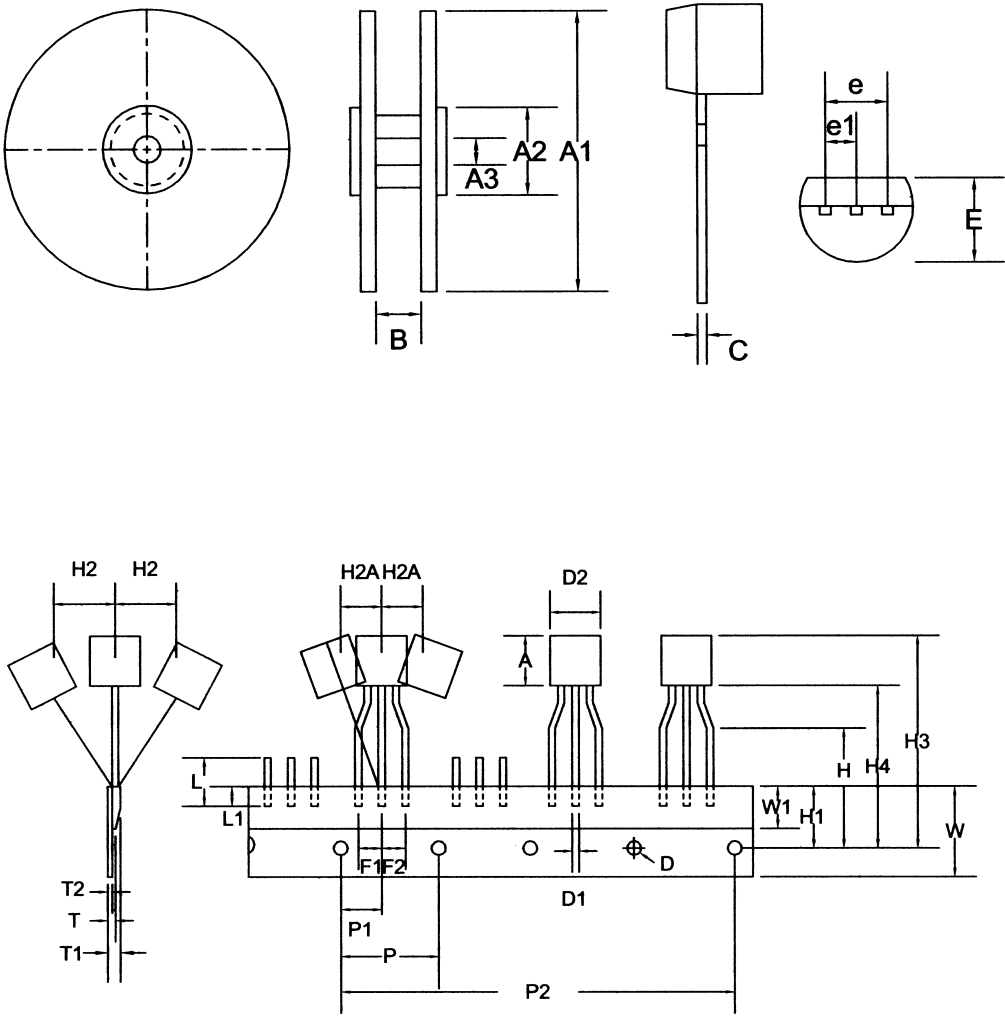
TO-92SP DIMENSION (FIG. NO. DIM-TO92SP-0011-B)



unit : mm

DIMENSION

TAPING TO-92 DIMENSION (FIG. NO. DIM-TAPING-TO92-0105-C 1/2)



UTC

UNISONIC TECHNOLOGIES CO., LTD.

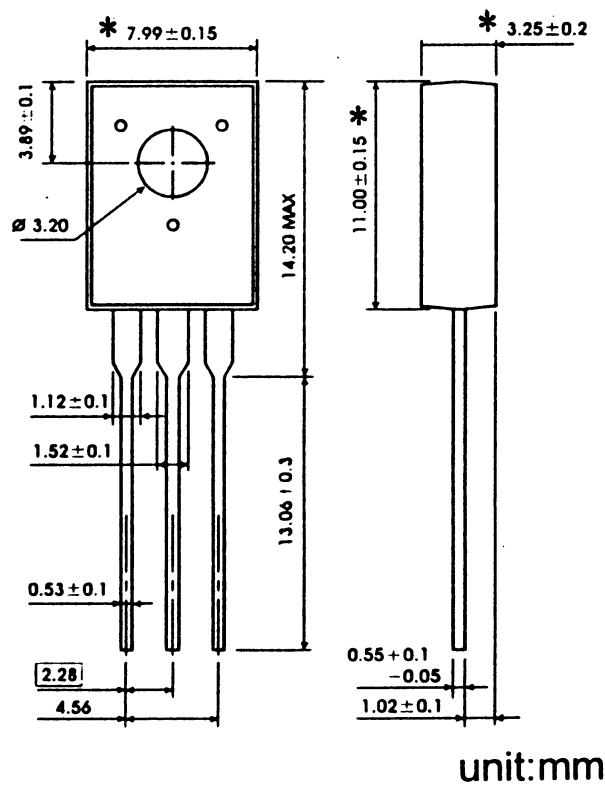
DIMENSION

TAPING TO-92 DIMENSION (FIG. NO. DIM-TAPING-TO92-0105-C 2/2)

Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.33	4.58	4.83	0.170	0.180	0.190
A1	357.00	360.00	363.00	14.055	14.173	14.291
A2	89.00	90.00	91.00	3.504	3.543	3.583
A3	29.00	30.00	31.00	1.142	1.181	1.220
B	44.00	45.00	46.00	1.732	1.772	1.811
C	—	0.40	—	—	0.016	—
D	3.80	4.00	4.20	0.150	0.157	0.165
D1	0.36	0.44	0.53	0.014	0.017	0.021
D2	4.33	4.58	4.83	0.170	0.180	0.190
E	3.30	3.50	3.70	0.130	0.138	0.146
e	—	2.54	—	—	0.100	—
e1	—	1.27	—	—	0.050	—
F1,F2	2.40	2.65	2.90	0.094	0.104	0.114
F1-F2	-0.30	0.00	+0.30	-0.012	0.000	+0.012
H	15.50	16.00	16.50	0.610	0.630	0.650
H1	8.50	9.00	9.50	0.335	0.354	0.374
H2	—	—	1.00	—	—	0.039
H2A	—	—	1.00	—	—	0.039
H3	—	—	27.00	—	—	1.063
H4	—	—	21.00	—	—	0.827
L	—	—	11.00	—	—	0.433
L1	2.50	—	—	0.098	—	—
P	12.50	12.70	12.90	0.492	0.500	0.508
P1	5.95	6.35	6.75	0.234	0.250	0.266
P2	50.30	50.80	51.30	1.980	2.000	2.020
T	—	—	0.55	—	—	0.022
T1	—	—	1.42	—	—	0.056
T2	0.36	0.52	0.68	0.014	0.020	0.027
W	17.50	18.25	19.00	0.689	0.719	0.748
W1	5.00	6.00	7.00	0.197	0.236	0.276

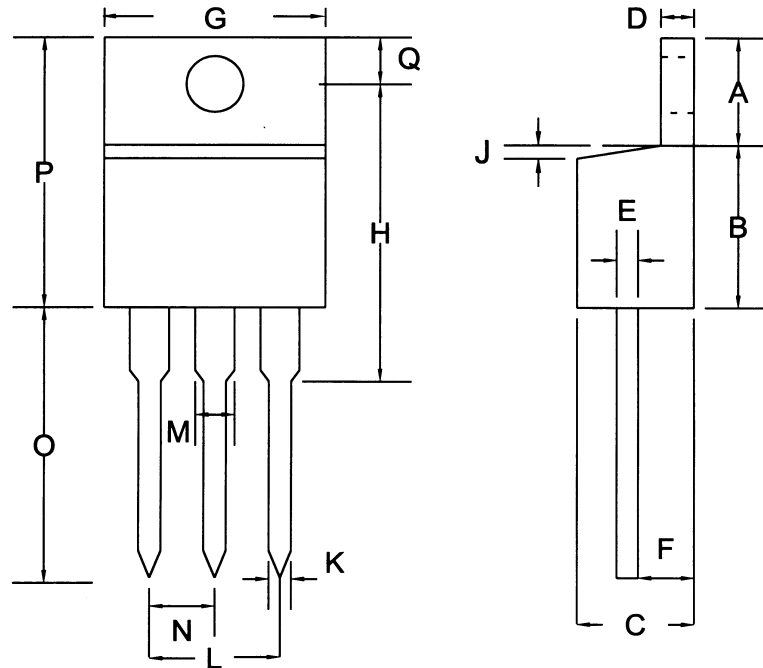
DIMENSION

TO-126 DIMENSION (FIG. NO. DIM-TO126-0002-A)



DIMENSION

TO-220 DIMENSION (FIG. NO. DIM-TO220-0104-B)

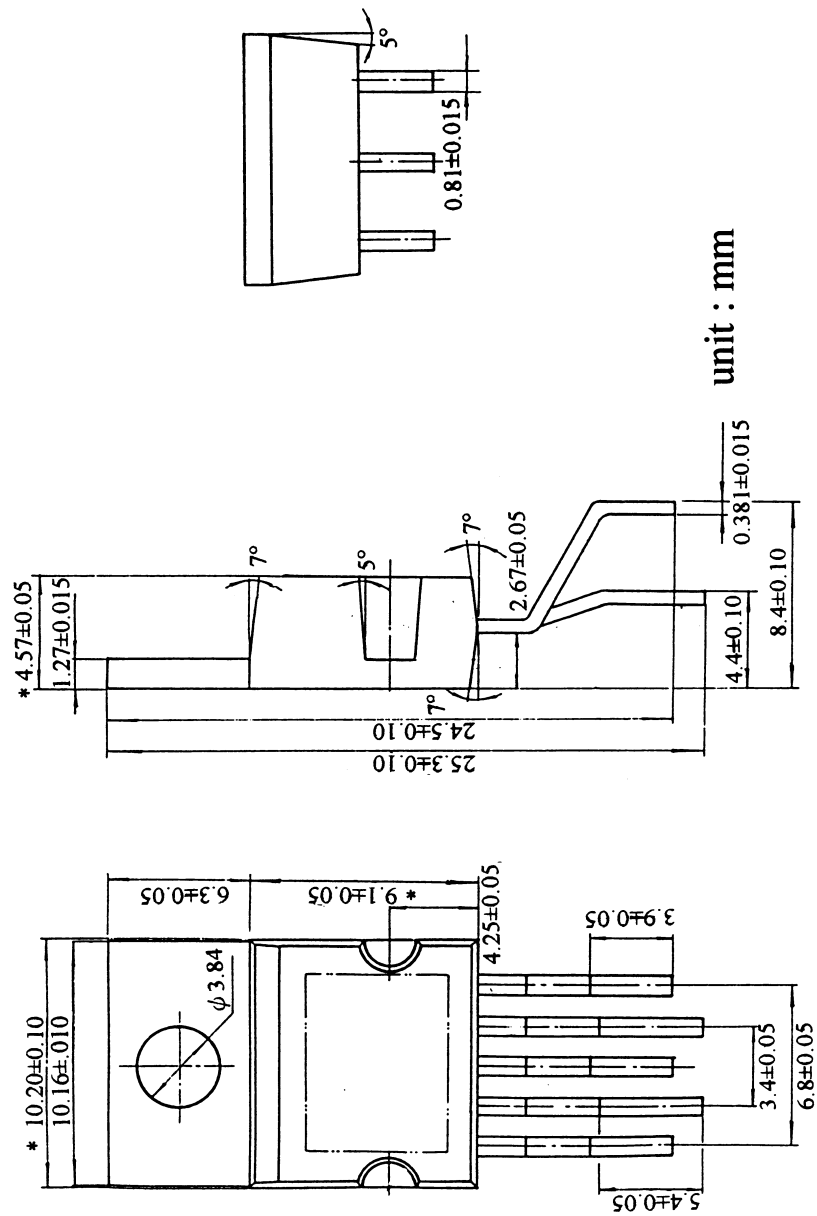


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	5.58	6.54	7.49	0.220	0.257	0.295
B	8.38	8.64	8.90	0.330	0.340	0.350
C	4.07	4.45	4.82	0.160	0.175	0.190
D	1.15	1.27	1.39	0.045	0.050	0.055
E	0.35	0.45	0.60	0.014	0.018	0.024
F	2.04	2.42	2.79	0.080	0.095	0.110
G	9.66	9.97	10.28	0.380	0.393	0.405
H	—	16.25	—	—	0.640	—
I	3.68	3.83	3.98	0.145	0.151	0.157
J	—	—	1.27	—	—	0.050
K	0.75	0.85	0.95	0.030	0.033	0.037
L	4.83	5.08	5.33	0.190	0.200	0.210
M	1.15	1.33	1.52	0.045	0.052	0.060
N	2.42	2.54	2.66	0.095	0.100	0.105
O	12.70	13.48	14.27	0.500	0.531	0.562
P	14.48	15.17	15.87	0.570	0.597	0.625
Q	2.54	2.79	3.04	0.100	0.110	0.120

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DIMENSION

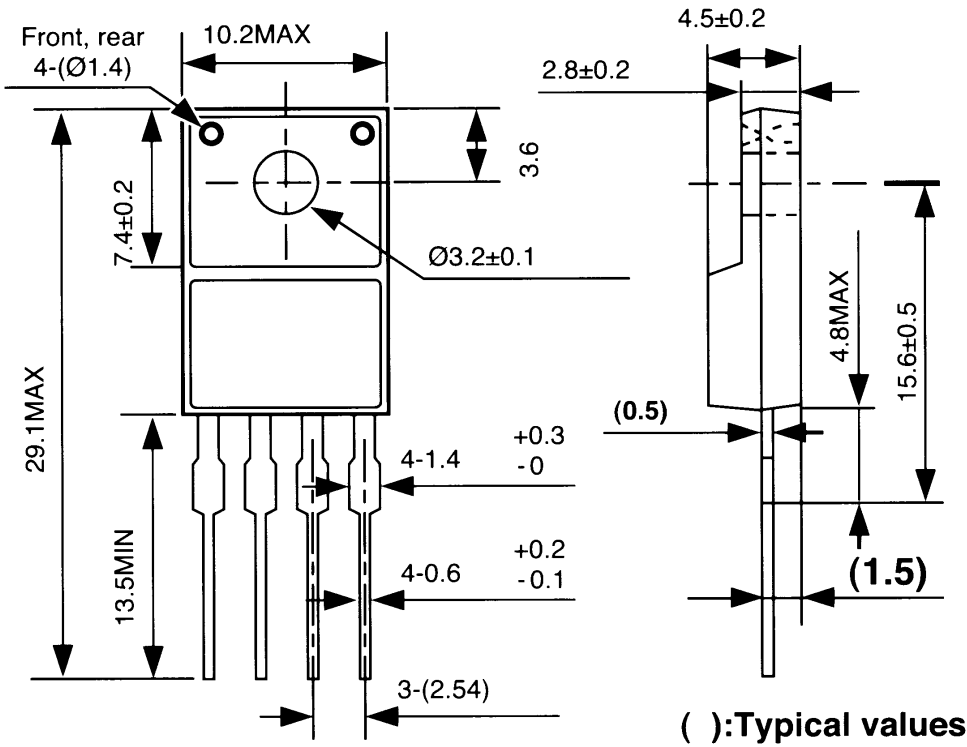
TO-220B DIMENSION (FIG. NO. DIM-TO220B-0002-A)



UTC UNISONIC TECHNOLOGIES CO., LTD.

DIMENSION

TO-220FP-4 DIMENSION (FIG. NO. DIM-TO220FP-0100-A)

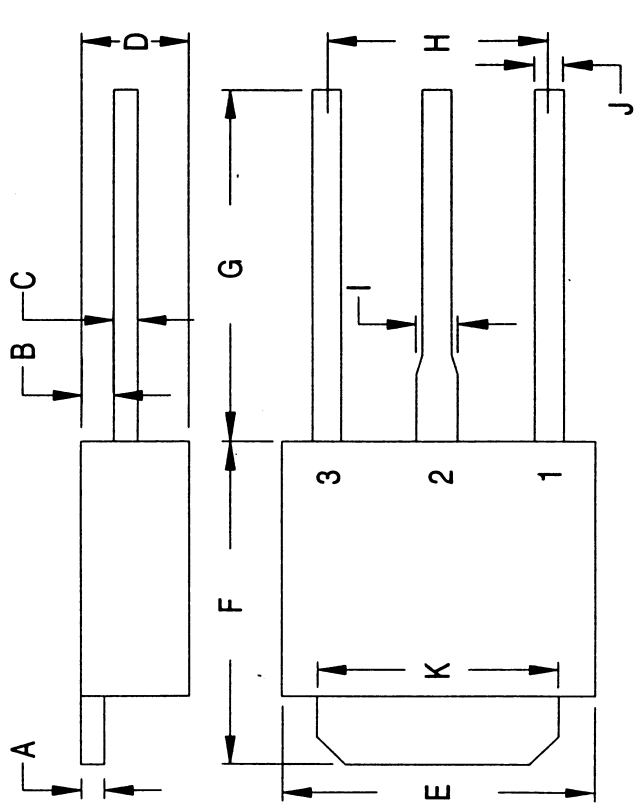


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DIMENSION

TO-251 DIMENSION (FIG. NO. DIM-TO251-0002-A)



unit : mm

DIM	MIN.	MAX.
G	6.5	-
H	-	4.6
I	-	0.9
J	-	0.8
K	5.2	5.5

DIM	MIN.	MAX.
A	0.45	0.55
B	0.9	1.5
C	0.45	0.6
D	2.2	2.4
E	6.4	6.8
F	6.8	7.2

*

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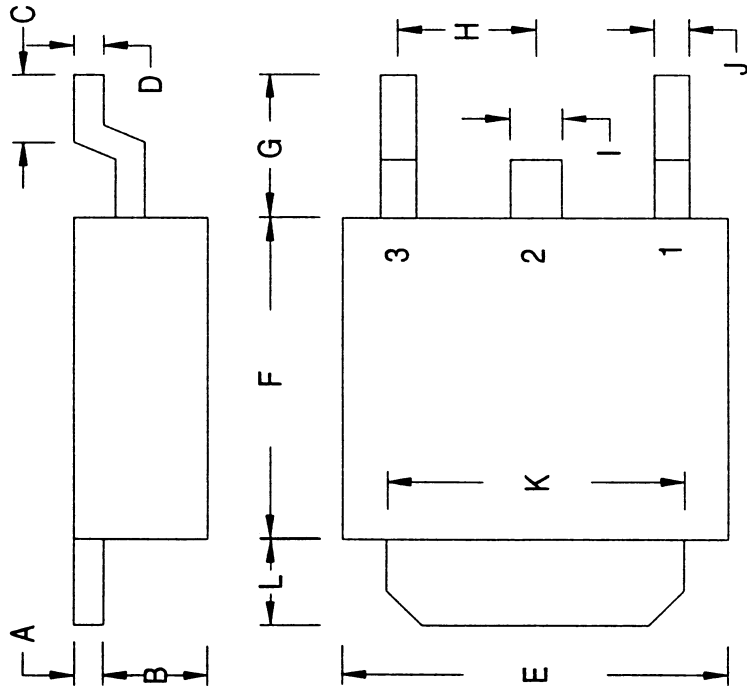
*

UTC

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DIMENSION

TO-252 DIMENSION (FIG. NO. DIM-TO252-0009-B)



unit : mm

DIM	MIN	MAX
A	0.45	0.55
B	1.65	1.95
C	0.90	1.50
D	0.45	0.60
E	6.40	6.80
F	5.20	5.60
G	2.20	2.80
H	—	2.30
I	—	0.90
J	—	0.80
K	5.20	5.50
L	1.40	1.60

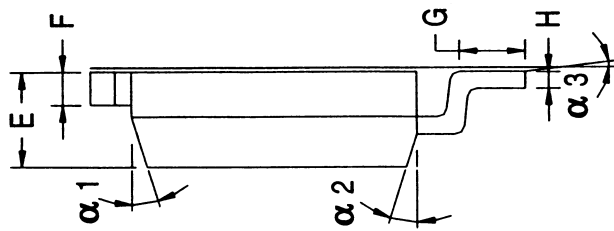
*

*

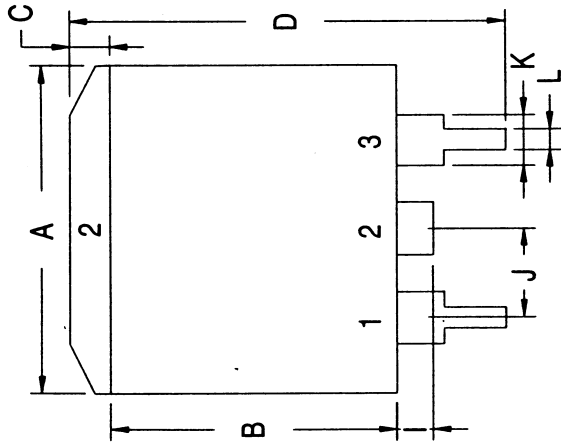
*

DIMENSION

TO-263 DIMENSION (FIG. NO. DIM-TO263-0002-A)



unit : mm



DIM	MIN.	MAX.
I	1.27	1.78
J	-	2.54
K	1.14	1.4
L	0.51	0.99
$\alpha 1$	6°	8°
$\alpha 2$	6°	8°
$\alpha 3$	0°	5°

DIM	MIN.	MAX.
A	9.65	10.29
B	8.38	9.4
C	-	1.4
D	14.61	15.88
E	4.06	4.83
F	1.14	1.4
G	2.29	2.79
H	0.46	0.74

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*

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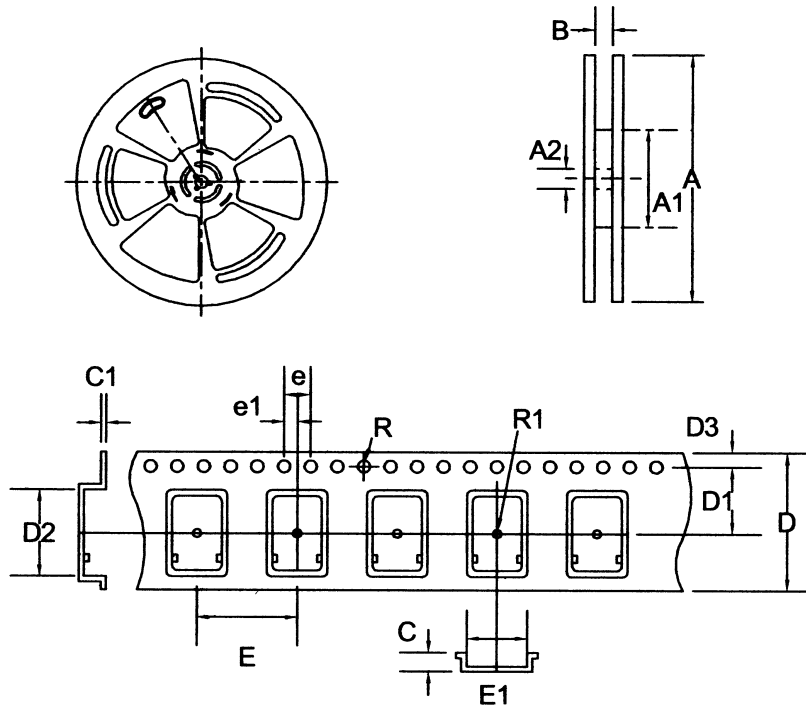
*

UTC

UNISONIC TECHNOLOGIES CO., LTD.

DIMENSION

TAPING TO-263 DIMENSION (FIG. NO. DIM-TAPING-TO263-0105-A)

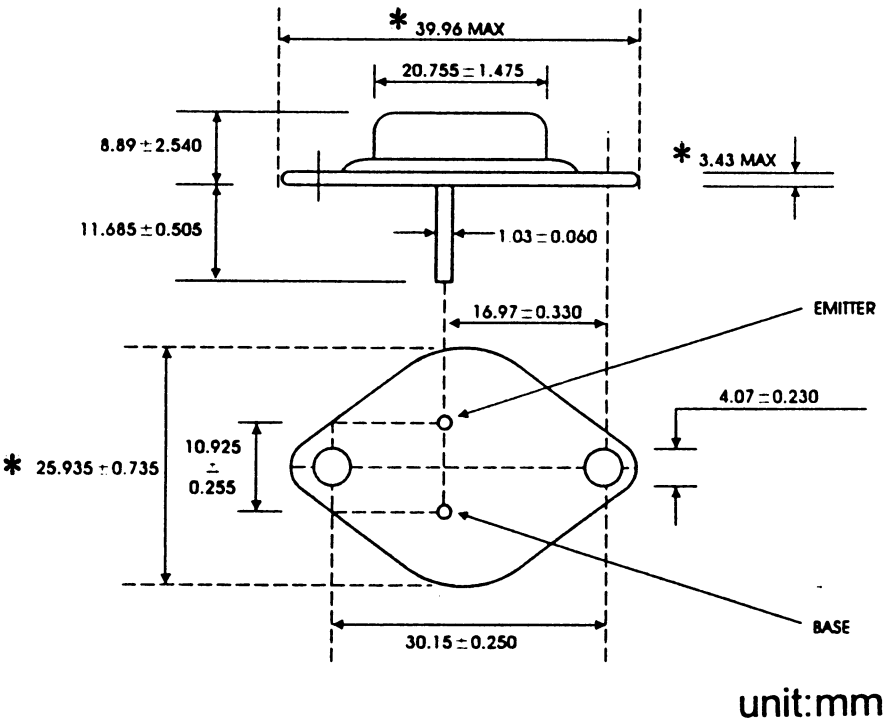


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	377.00	380.00	383.00	14.843	14.961	15.079
A1	96.00	97.00	98.00	3.780	3.819	3.858
A2	12.50	13.00	13.50	0.492	0.512	0.531
B	20.00	24.00	28.00	0.787	0.945	1.102
C	4.80	4.90	5.00	0.189	0.193	0.197
C1	0.30	0.35	0.40	0.012	0.014	0.016
D	23.70	24.00	24.30	0.933	0.945	0.957
D1	11.35	11.50	11.65	0.447	0.453	0.459
D2	15.80	15.90	16.00	0.622	0.626	0.630
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	15.90	16.00	16.10	0.626	0.630	0.634
E1	10.70	10.80	10.90	0.421	0.425	0.429
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.85	2.00	2.15	0.073	0.079	0.085
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.90	2.00	2.10	0.075	0.079	0.083

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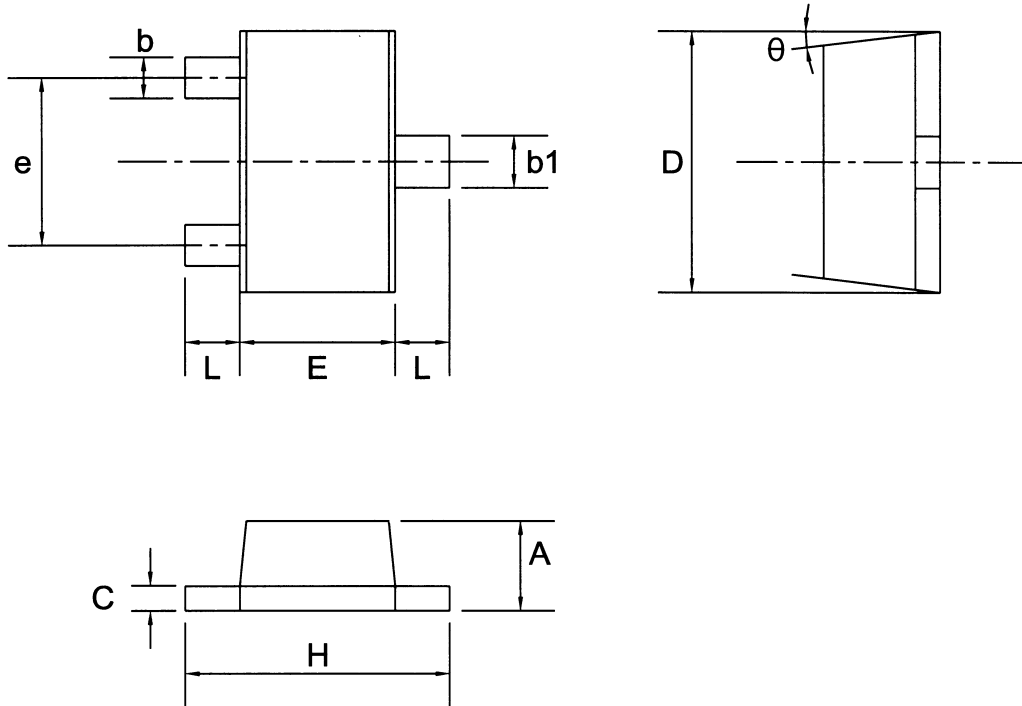
DIMENSION

TO-3 DIMENSION (FIG. NO. DIM-TO3-0002-A)



DIMENSION

SOT-113 DIMENSION (FIG. NO. DIM-SOT113-0103-B)

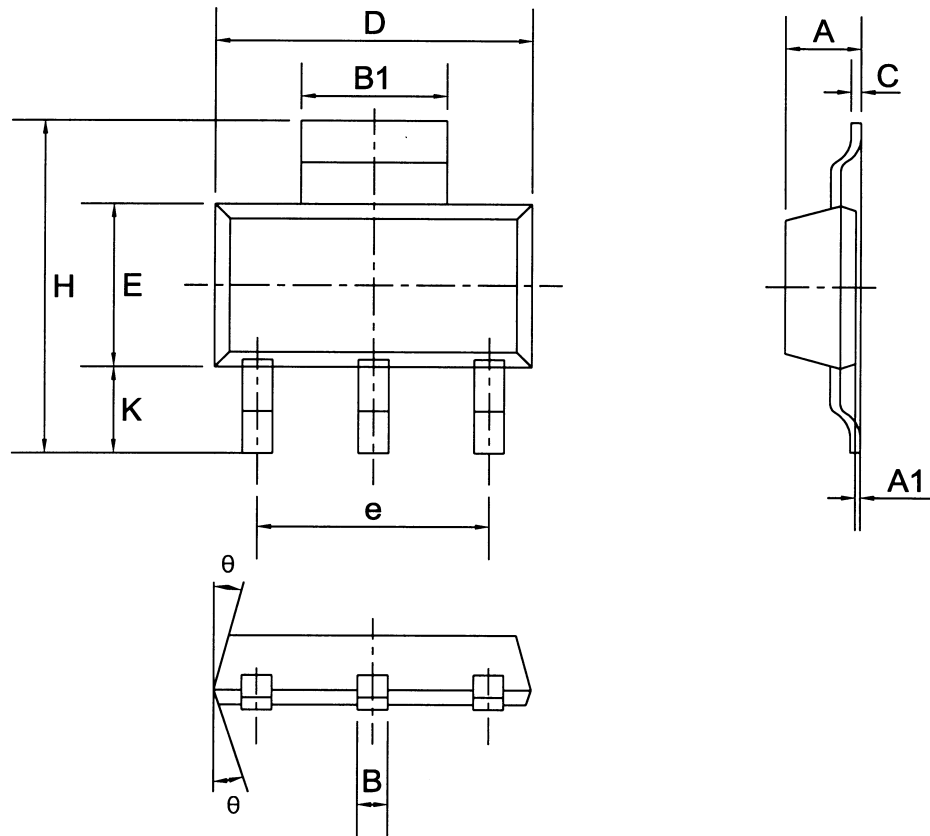


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	0.56	0.61	0.66	0.022	0.024	0.026
b	0.19	0.22	0.25	0.007	0.009	0.010
b1	0.25	0.28	0.31	0.010	0.011	0.012
C	0.10	0.13	0.16	0.004	0.005	0.006
D	1.35	1.40	1.45	0.053	0.055	0.057
E	0.76	0.81	0.86	0.030	0.032	0.034
e	—	0.90	—	—	0.035	—
H	1.33	1.38	1.43	0.052	0.054	0.056
L	0.235	0.285	0.335	0.009	0.011	0.013
θ	0°	—	7°	0°	—	7°

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DIMENSION

SOT-223 DIMENSION (FIG. NO. DIM-SOT223-0103-B)

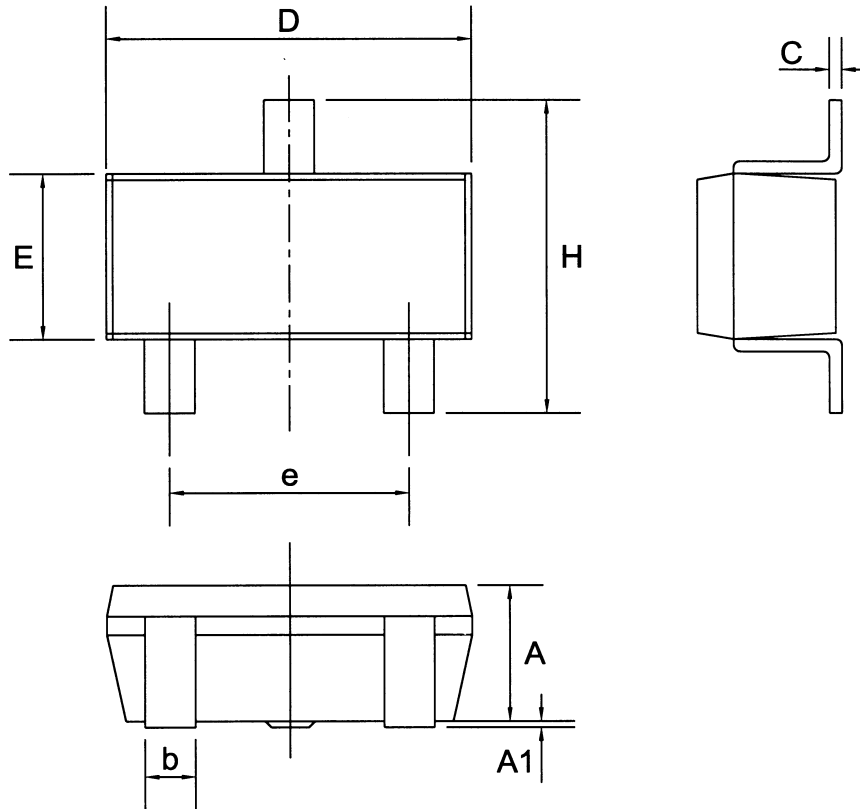


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.50	1.65	1.80	0.059	0.065	0.071
A1	0.02	0.05	0.08	0.001	0.002	0.003
B	0.60	0.70	0.80	0.024	0.028	0.031
B1	2.90	3.00	3.15	0.114	0.118	0.124
C	0.28	0.30	0.32	0.011	0.012	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
E	3.30	3.50	3.70	0.130	0.138	0.146
e	—	4.60	—	—	0.181	—
H	6.70	7.00	7.30	0.264	0.276	0.287
K	1.50	1.75	2.00	0.059	0.069	0.079
θ	0°	—	13°	0°	—	13°

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DIMENSION

SOT-23 DIMENSION (FIG. NO. DIM-SOT23-0103-B)

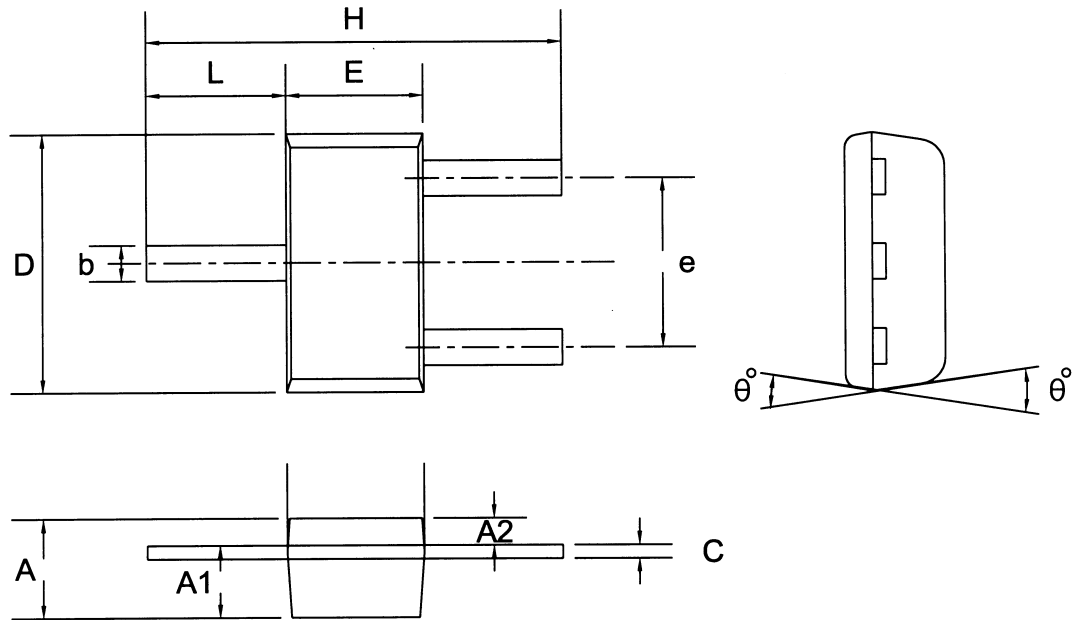


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.05	1.15	1.35	0.041	0.045	0.053
A1	—	0.05	0.10	—	0.002	0.004
b	0.35	0.40	0.55	0.014	0.016	0.022
C	0.08	0.10	0.20	0.003	0.004	0.008
D	2.70	2.90	3.10	0.106	0.114	0.122
E	1.20	1.35	1.50	0.047	0.053	0.059
e	1.70	1.90	2.10	0.067	0.075	0.083
H	2.35	2.55	2.75	0.093	0.100	0.108

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DIMENSION

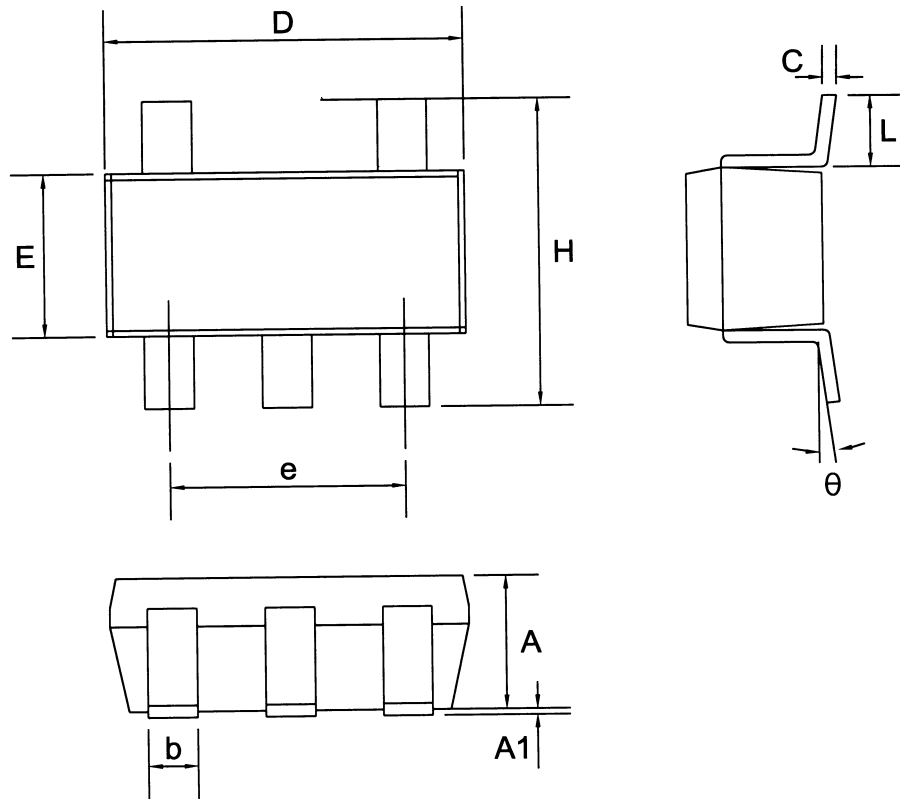
SOT-23 VERTICAL DIMENSION (FIG. NO. DIM-SOT23V-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.02	1.10	1.18	0.040	0.043	0.046
A1	0.75	0.80	0.85	0.030	0.031	0.033
A2	0.25	0.30	0.35	0.010	0.012	0.014
b	0.30	0.40	0.50	0.012	0.016	0.020
C	0.05	0.15	0.25	0.002	0.006	0.010
D	2.80	2.90	3.00	0.110	0.114	0.118
E	1.45	1.50	1.55	0.057	0.059	0.061
e	1.70	1.90	2.10	0.067	0.075	0.083
H	—	4.65	—	—	0.183	—
L	1.52	—	—	0.060	—	—
θ	0°	—	10°	0°	—	10°

DIMENSION

SOT-25 DIMENSION (FIG. NO. DIM-SOT25-0103-B)

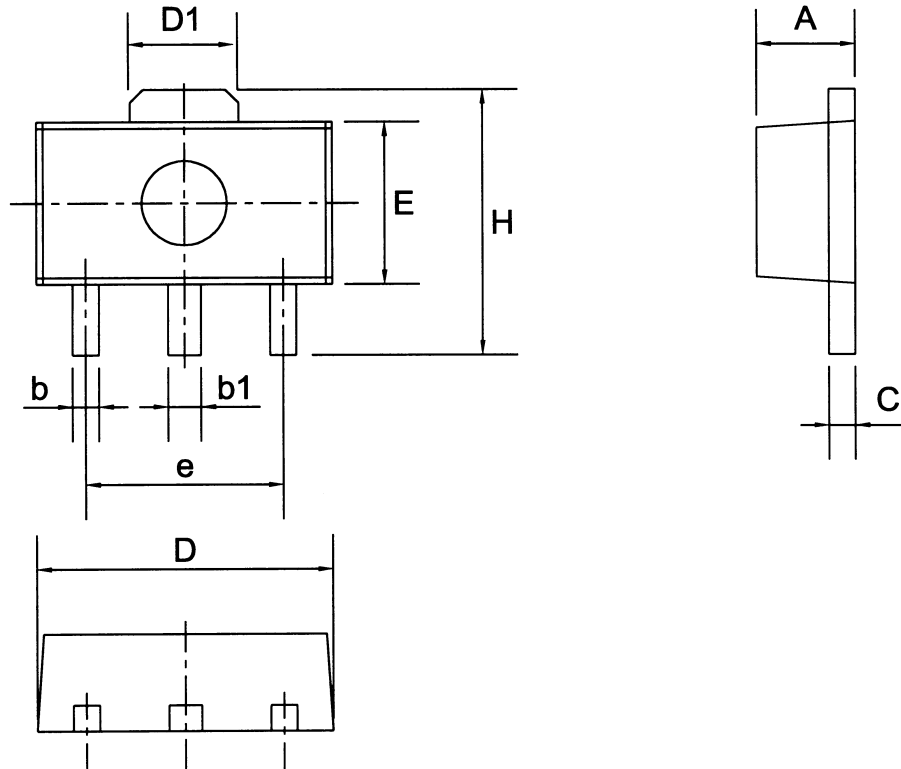


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.00	1.10	1.20	0.039	0.043	0.047
A1	0.00	—	0.10	0.000	—	0.004
b	0.35	0.40	0.50	0.014	0.016	0.020
C	0.10	0.15	0.25	0.004	0.006	0.010
D	2.70	2.90	3.10	0.106	0.114	0.122
E	1.40	1.60	1.80	0.055	0.063	0.071
e	—	1.90	—	—	0.075	—
H	2.60	2.80	3.00	0.102	0.110	0.118
L	0.35	0.45	0.55	0.014	0.018	0.022
θ	0°	5°	10°	0°	5°	10°

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DIMENSION

SOT-89 DIMENSION (FIG. NO. DIM-SOT89-0103-B)

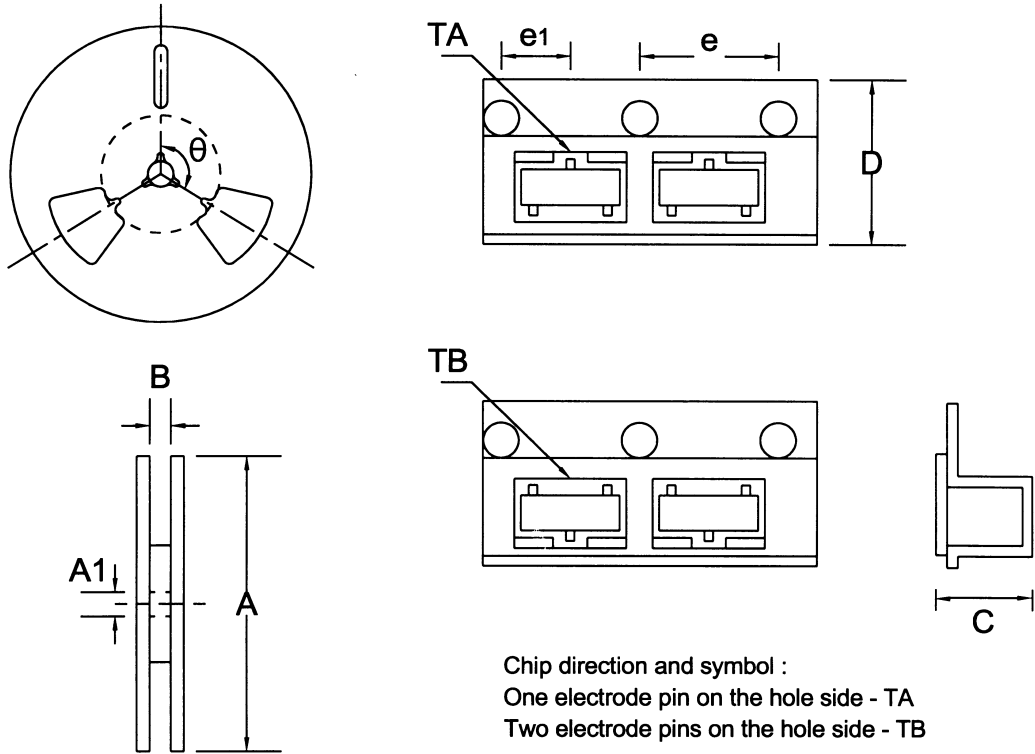


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.30	1.50	1.70	0.051	0.059	0.067
b	0.25	0.40	0.55	0.010	0.016	0.022
b1	0.40	0.50	0.60	0.016	0.020	0.024
C	0.30	0.40	0.50	0.012	0.016	0.020
D	4.30	4.50	4.70	0.169	0.177	0.185
D1	1.45	1.65	1.85	0.057	0.065	0.073
E	2.30	2.50	2.70	0.091	0.098	0.106
e	2.90	3.00	3.10	0.114	0.118	0.122
H	3.90	4.10	4.30	0.154	0.161	0.169

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DIMENSION

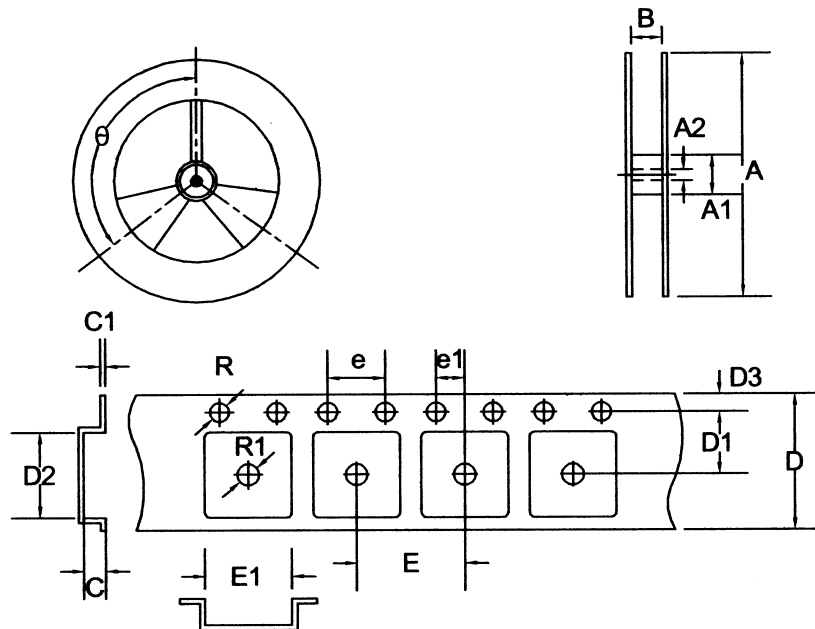
TAPING SOT-23 DIMENSION (FIG. NO. DIM-TAPING- SOT23-0104-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	176.00	178.00	180.00	6.929	7.008	7.087
A1	12.80	13.00	13.20	0.504	0.512	0.520
B	9.80	10.00	10.20	0.386	0.394	0.402
C	1.45	1.55	1.65	0.057	0.061	0.065
D	7.80	8.00	8.20	0.307	0.315	0.323
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
θ	—	120°	—	—	120°	—

DIMENSION

TAPING SOT-223 DIMENSION (FIG. NO. DIM-TAPING-SOT223-0105-A)

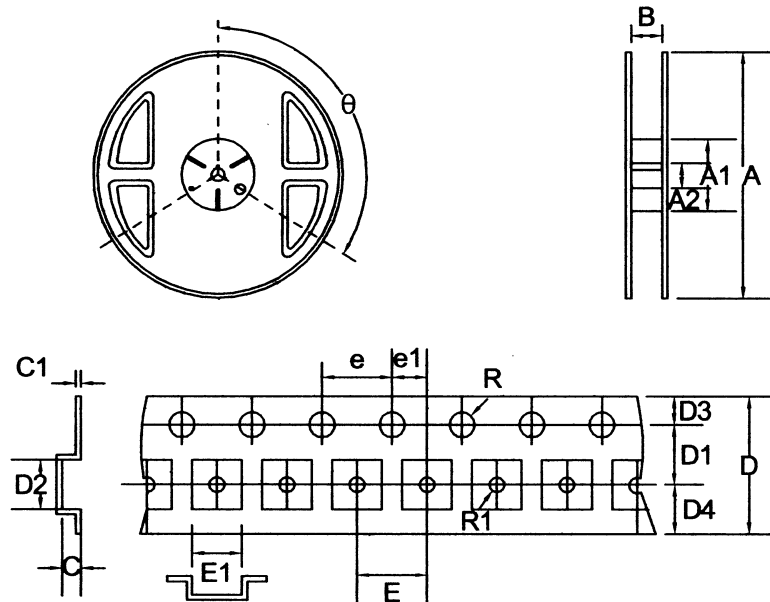


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	416.00	420.00	424.00	16.378	16.535	16.693
A1	78.00	80.00	82.00	3.071	3.150	3.228
A2	12.50	13.00	13.50	0.492	0.512	0.531
B	12.50	13.50	14.50	0.492	0.531	0.571
C	2.00	2.10	2.20	0.079	0.083	0.087
C1	0.25	0.30	0.35	0.010	0.012	0.014
D	11.70	12.00	12.30	0.461	0.472	0.484
D1	5.40	5.50	5.60	0.213	0.217	0.220
D2	7.40	7.50	7.60	0.291	0.295	0.299
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	6.80	6.90	7.00	0.268	0.272	0.276
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.60	0.057	0.059	0.063
θ	—	120°	—	—	120°	—

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DIMENSION

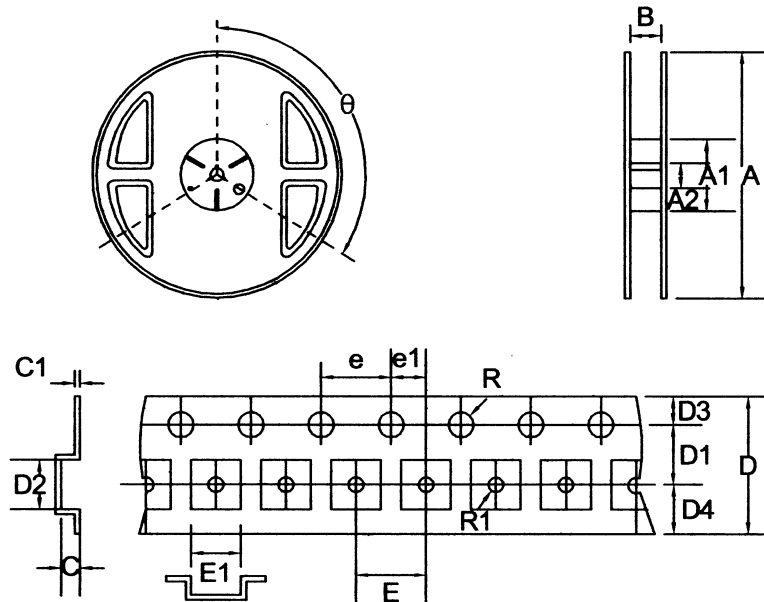
TAPING SOT-25 DIMENSION (FIG. NO. DIM-TAPING-SOT25/26-0105-A)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	178.00	180.00	182.00	7.008	7.087	7.165
A1	59.00	60.00	61.00	2.323	2.362	2.402
A2	12.80	13.00	13.20	0.504	0.512	0.520
B	8.70	9.00	9.30	0.343	0.354	0.366
C	1.40	1.50	1.60	0.055	0.059	0.063
C1	0.20	0.25	0.30	0.008	0.010	0.012
D	7.80	8.00	8.20	0.307	0.315	0.323
D1	3.45	3.50	3.55	0.136	0.138	0.140
D2	3.10	3.20	3.30	0.122	0.126	0.130
D3	1.65	1.75	1.85	0.065	0.069	0.073
D4	2.65	2.75	2.85	0.104	0.108	0.112
E	3.90	4.00	4.10	0.154	0.157	0.161
E1	3.20	3.30	3.40	0.126	0.130	0.134
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.00	1.10	1.20	0.039	0.043	0.047
θ	—	120°	—	—	120°	—

DIMENSION

TAPING SOT-26 DIMENSION (FIG. NO. DIM-TAPING-SOT25/26-0105-A)

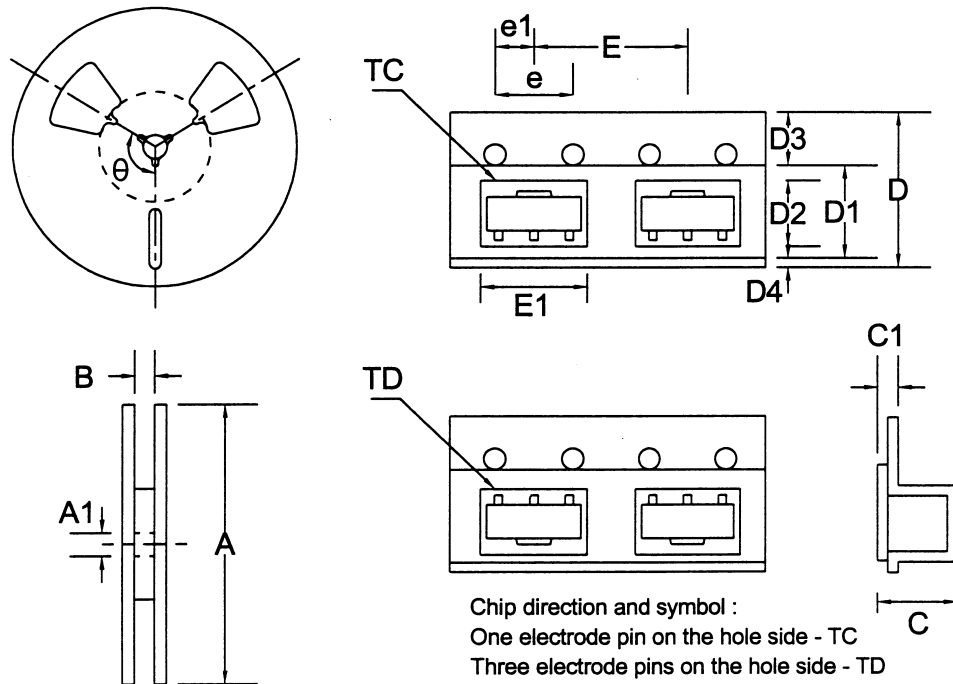


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	178.00	180.00	182.00	7.008	7.087	7.165
A1	59.00	60.00	61.00	2.323	2.362	2.402
A2	12.80	13.00	13.20	0.504	0.512	0.520
B	8.70	9.00	9.30	0.343	0.354	0.366
C	1.40	1.50	1.60	0.055	0.059	0.063
C1	0.20	0.25	0.30	0.008	0.010	0.012
D	7.80	8.00	8.20	0.307	0.315	0.323
D1	3.45	3.50	3.55	0.136	0.138	0.140
D2	3.10	3.20	3.30	0.122	0.126	0.130
D3	1.65	1.75	1.85	0.065	0.069	0.073
D4	2.65	2.75	2.85	0.104	0.108	0.112
E	3.90	4.00	4.10	0.154	0.157	0.161
E1	3.20	3.30	3.40	0.126	0.130	0.134
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.00	1.10	1.20	0.039	0.043	0.047
θ	—	120°	—	—	120°	—

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DIMENSION

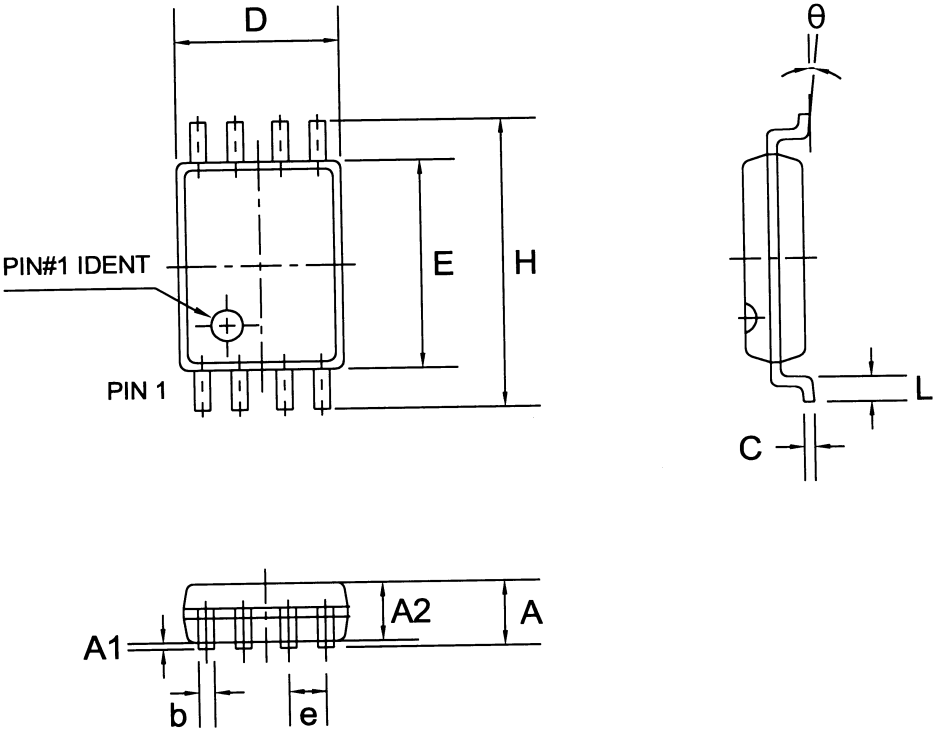
TAPING SOT-89 DIMENSION (FIG. NO. DIM-TAPING-SOT89-0104-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	176.00	178.00	180.00	6.929	7.008	7.087
A1	12.80	13.00	13.20	0.504	0.512	0.520
B	13.80	14.00	14.20	0.543	0.551	0.559
C	1.80	1.90	2.00	0.071	0.075	0.079
C1	0.35	0.40	0.45	0.014	0.016	0.018
D	11.70	12.00	12.30	0.460	0.472	0.484
D1	9.30	9.50	9.70	0.366	0.374	0.382
D2	4.40	4.50	4.60	0.173	0.177	0.181
D3	1.40	1.50	1.60	0.055	0.060	0.063
D4	0.45	0.50	0.55	0.018	0.020	0.022
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	4.80	4.90	5.00	0.189	0.193	0.197
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
θ	—	120°	—	—	120°	—

DIMENSION

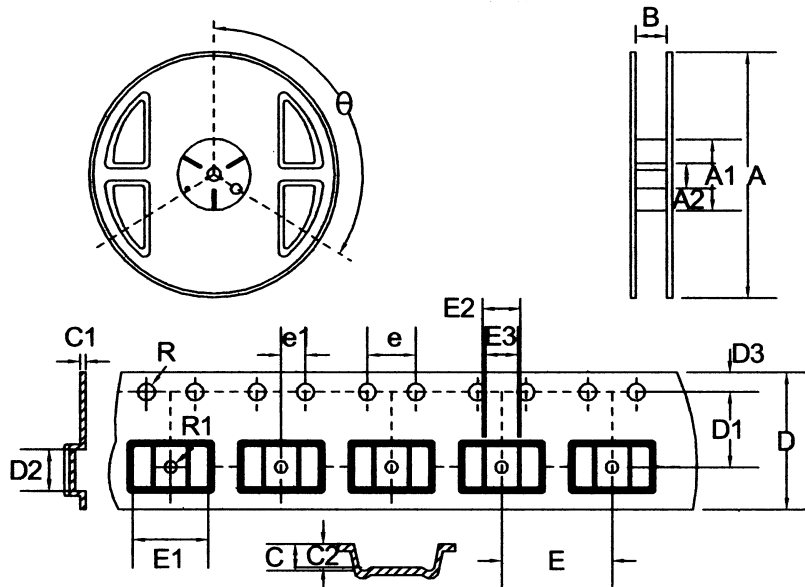
TSSOP-8 DIMENSION (FIG. NO. DIM-TSSOP8-0103-B)



Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.05	1.10	1.20	0.041	0.043	0.047
A1	0.05	0.10	0.15	0.002	0.004	0.006
A2	0.90	1.00	1.10	0.035	0.039	0.043
b	—	0.27	—	—	0.011	—
C	—	0.127	—	—	0.005	—
D	2.90	3.05	3.10	0.114	0.120	0.122
E	4.30	4.40	4.50	0.169	0.173	0.177
e	—	0.65	—	—	0.026	—
H	6.20	6.40	6.60	0.244	0.252	0.260
L	0.50	0.60	0.70	0.020	0.024	0.028
θ	0°	—	8°	0°	—	8°

DIMENSION

TAPING TSSOP-8 DIMENSION (FIG. NO. DIM-TAPING-TSSOP8-0105-A)

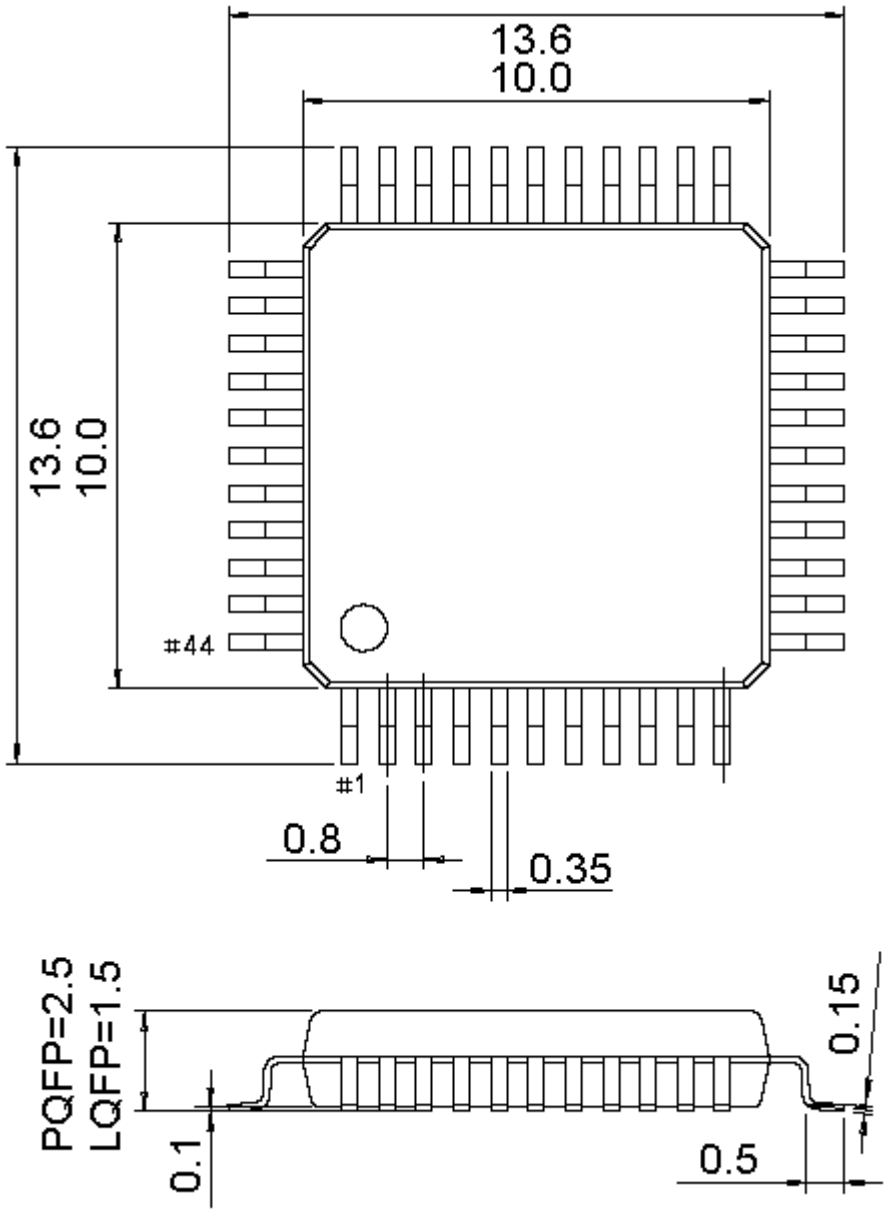


Symbol	Dimensions In Millimeters			Dimensions In Inches		
	Min	Nom	Max	Min	Nom	Max
A	178.00	180.00	182.00	7.008	7.087	7.165
A1	59.00	60.00	61.00	2.323	2.362	2.402
A2	12.80	13.00	13.20	0.504	0.512	0.520
B	11.00	12.00	13.00	0.433	0.472	0.512
C	1.50	1.60	1.70	0.060	0.063	0.067
C1	0.25	0.30	0.35	0.010	0.012	0.014
C2	1.20	1.30	1.40	0.047	0.051	0.055
D	11.70	12.00	12.30	0.461	0.472	0.484
D1	5.40	5.50	5.60	0.213	0.217	0.220
D2	3.30	3.40	3.50	0.130	0.134	0.138
D3	1.65	1.75	1.85	0.065	0.069	0.073
E	7.90	8.00	8.10	0.311	0.315	0.319
E1	6.70	6.80	6.90	0.264	0.268	0.272
E2	4.30	4.40	4.50	0.170	0.173	0.177
E3	3.70	3.80	3.90	0.146	0.150	0.154
e	3.90	4.00	4.10	0.154	0.157	0.161
e1	1.90	2.00	2.10	0.075	0.079	0.083
R	1.45	1.50	1.60	0.057	0.059	0.063
R1	1.45	1.50	1.60	0.057	0.059	0.063
θ	—	120°	—	—	120°	—

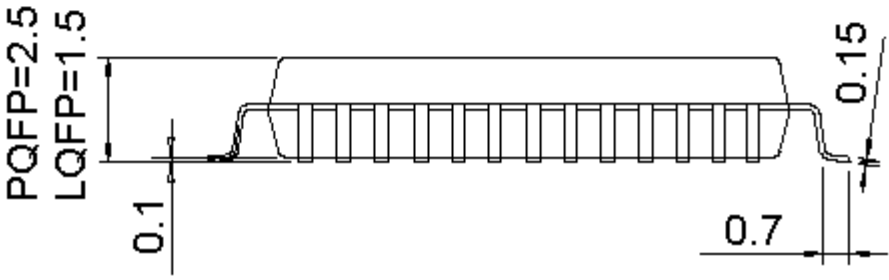
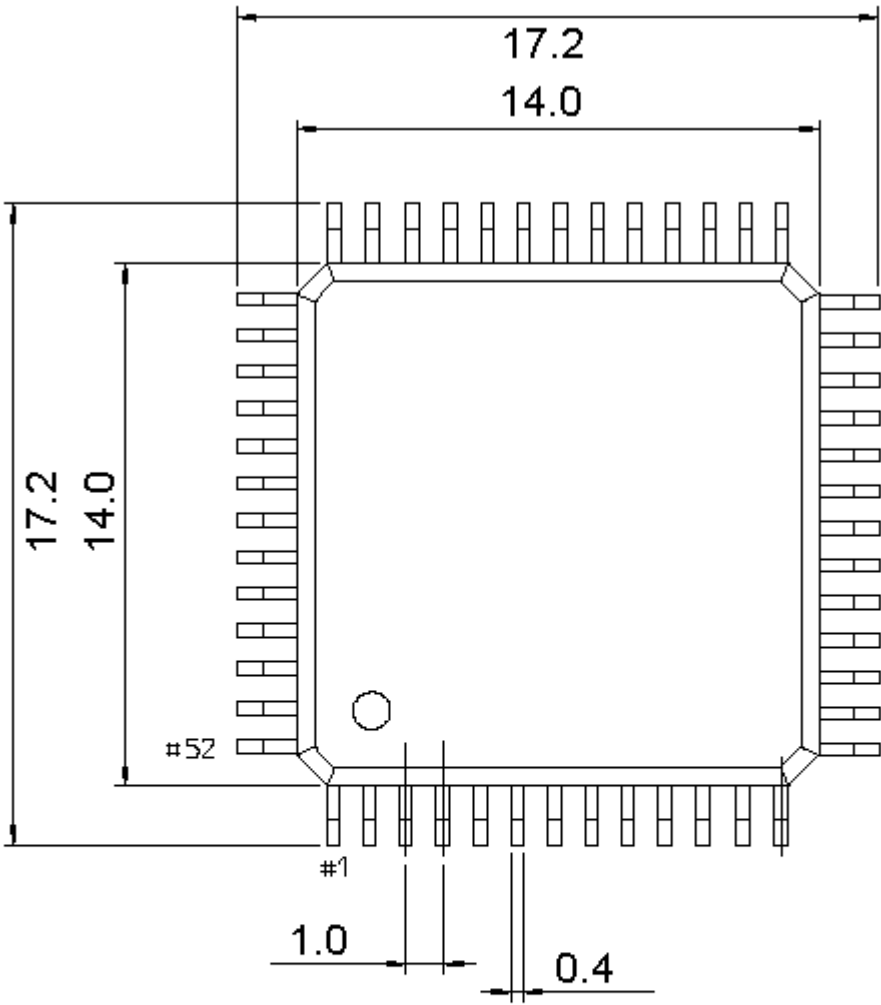
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QFP 类 (PQFP)

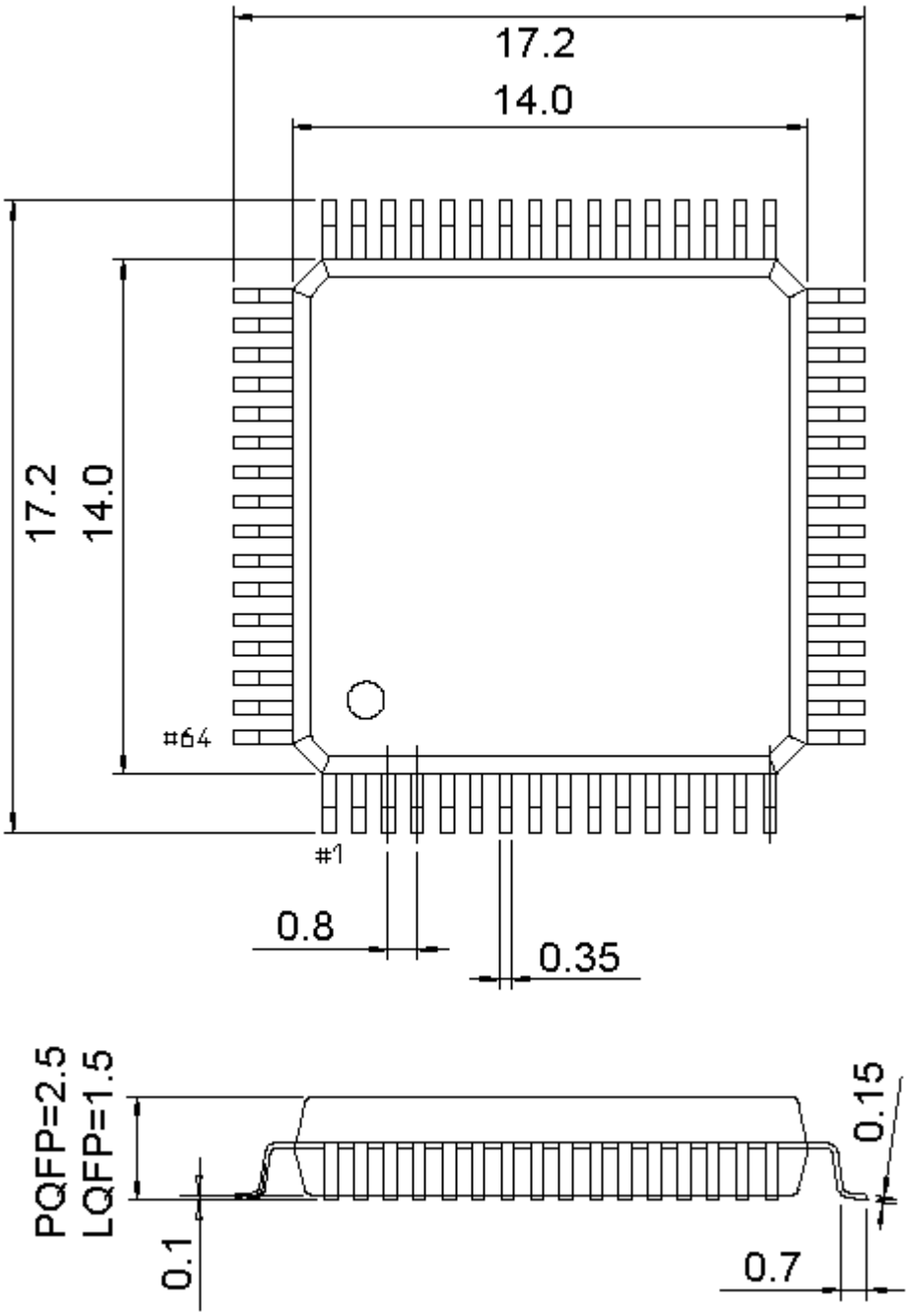
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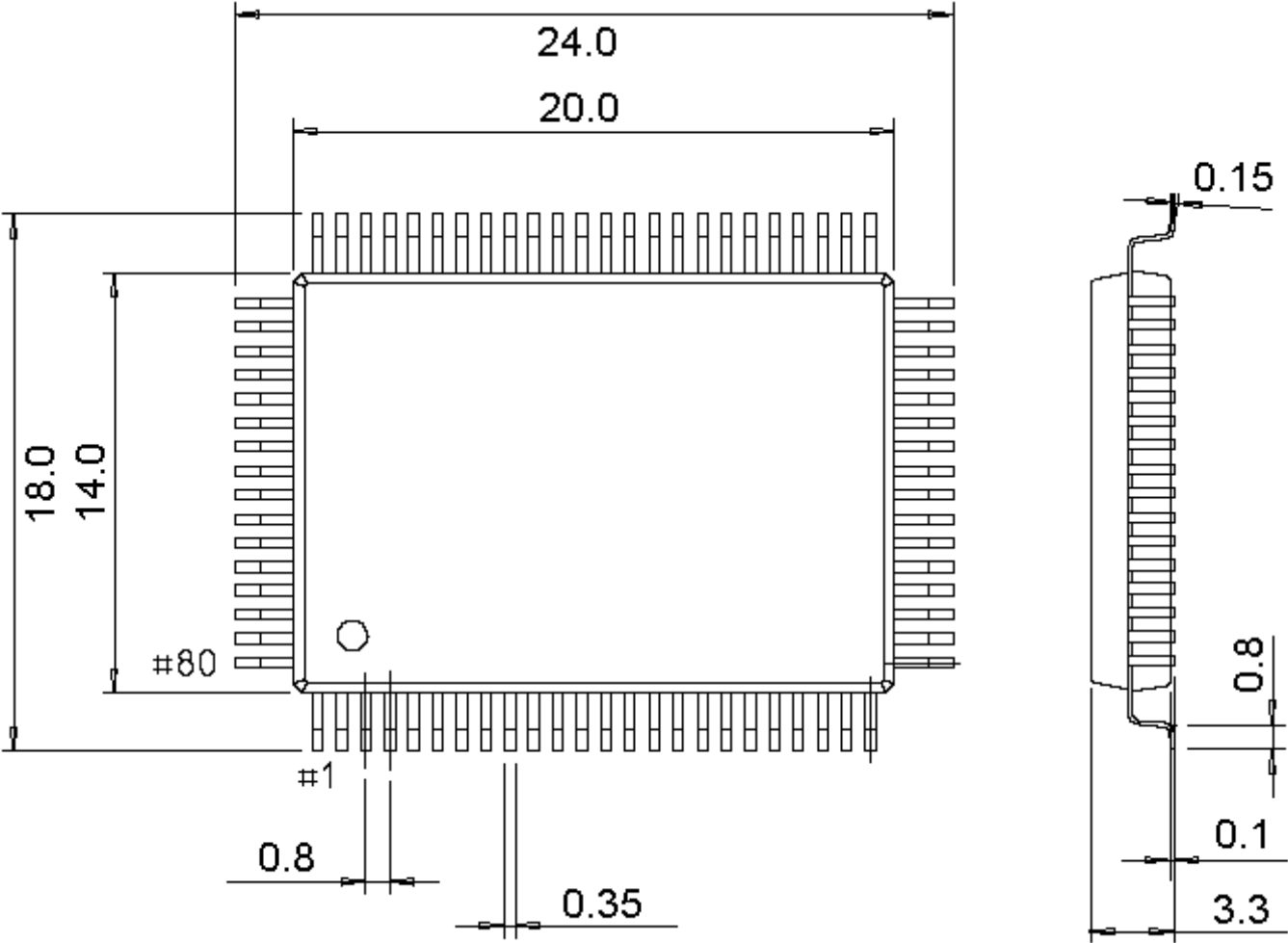
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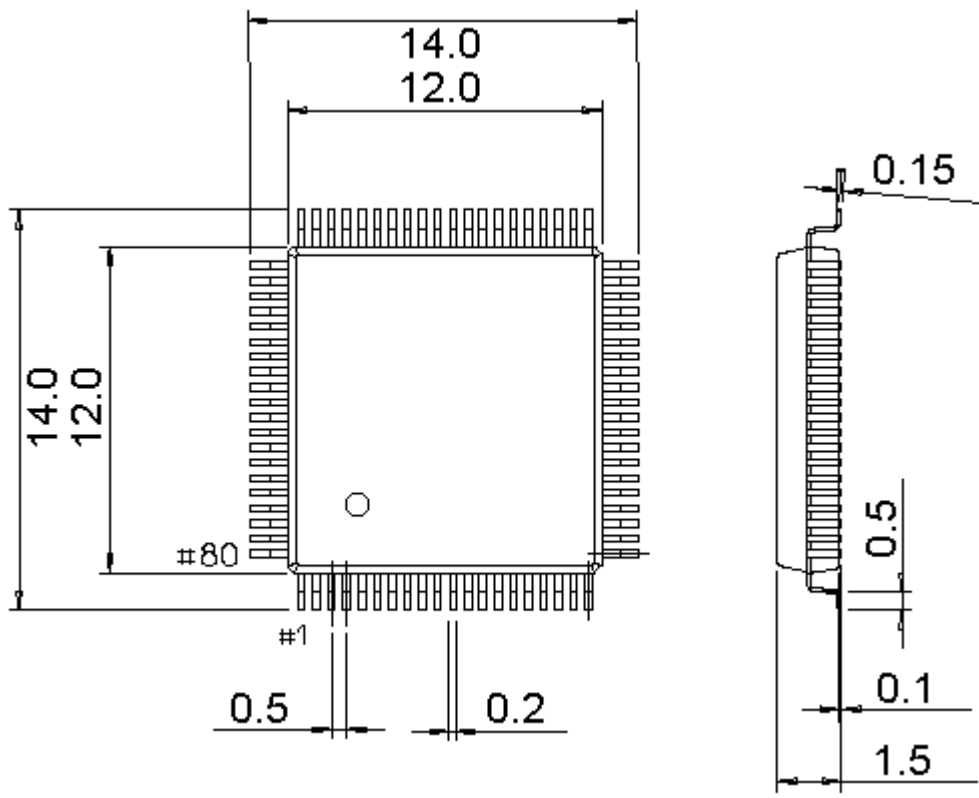
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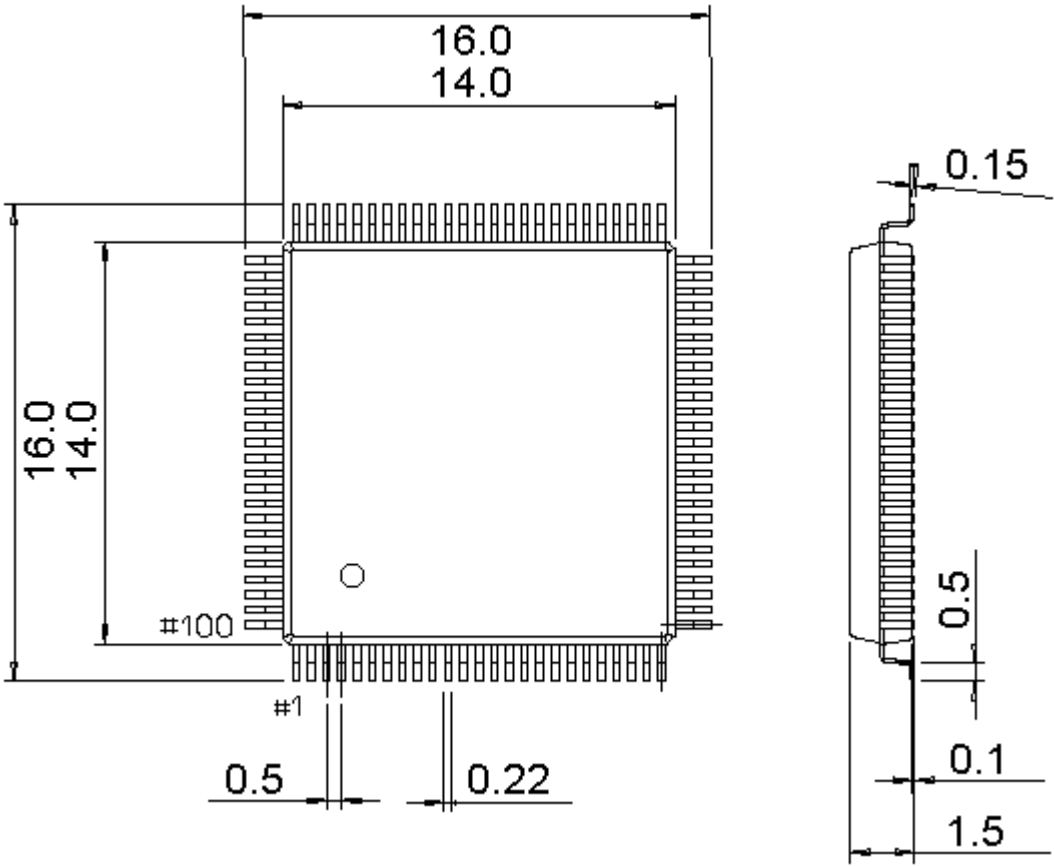
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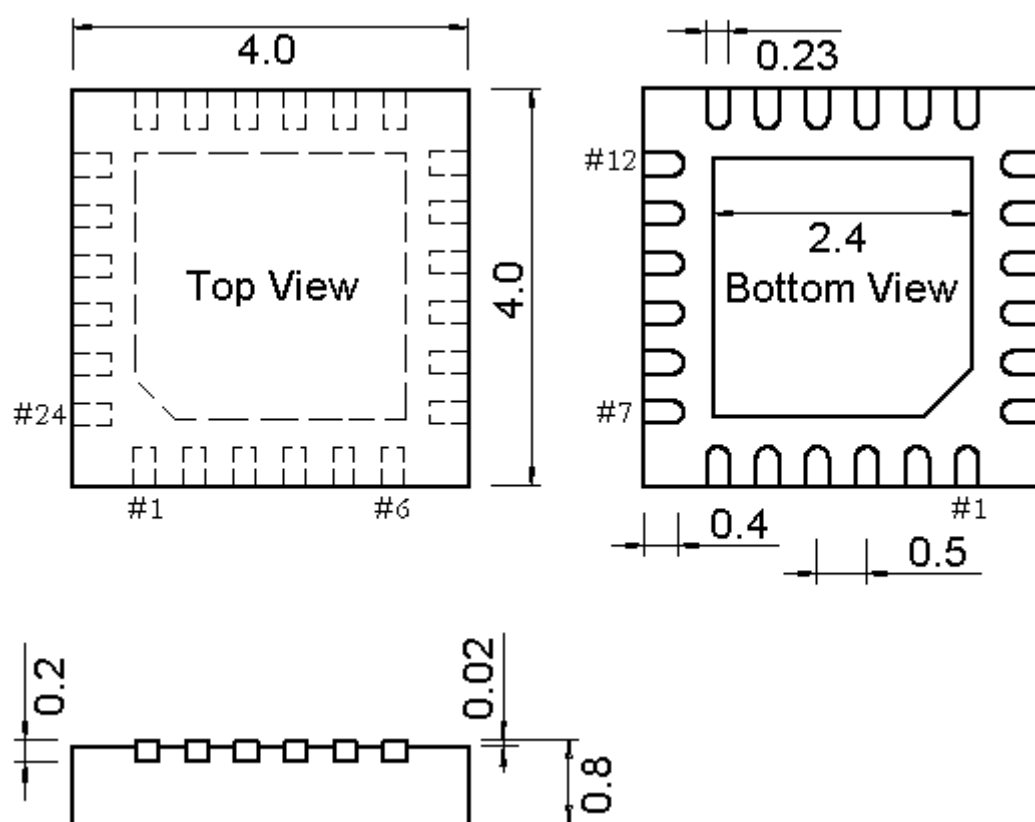


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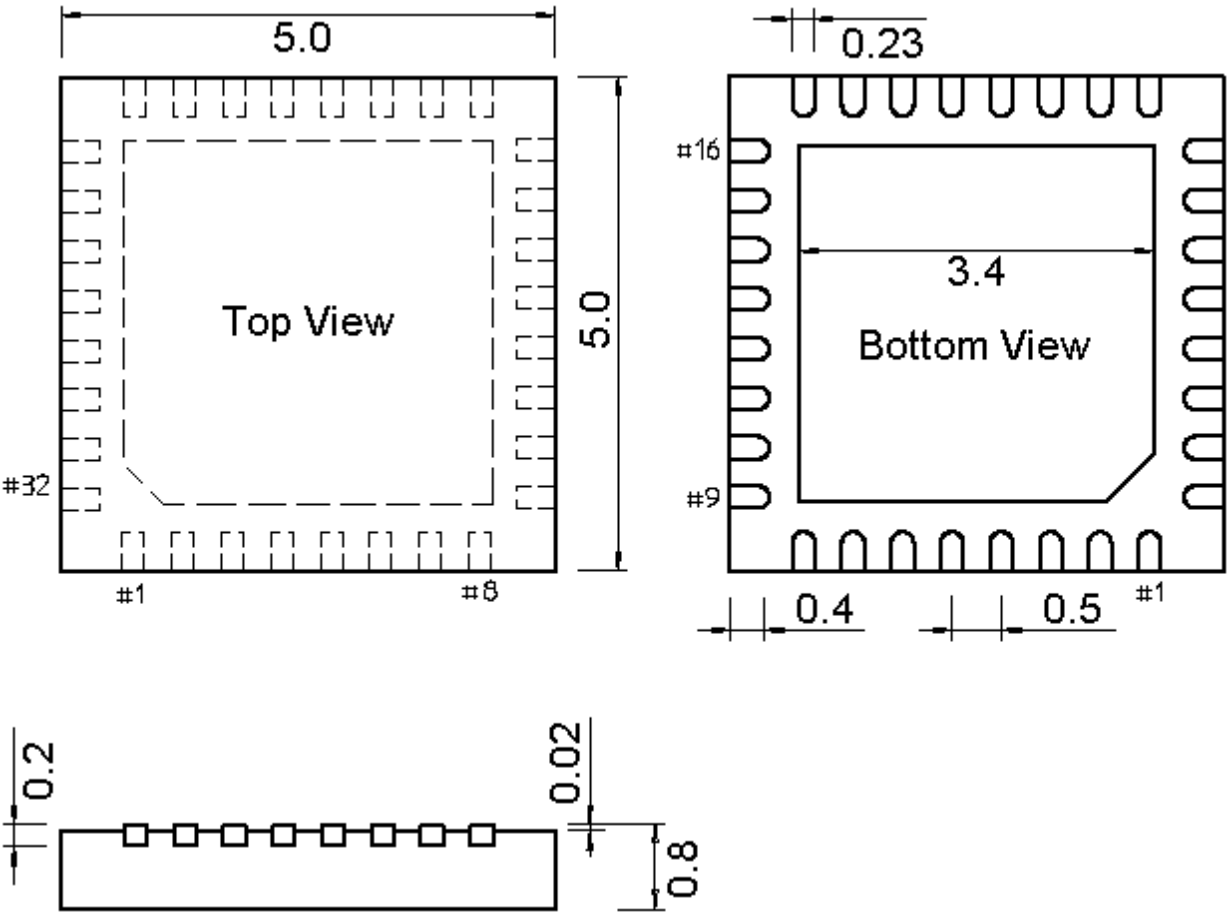


QFN 类

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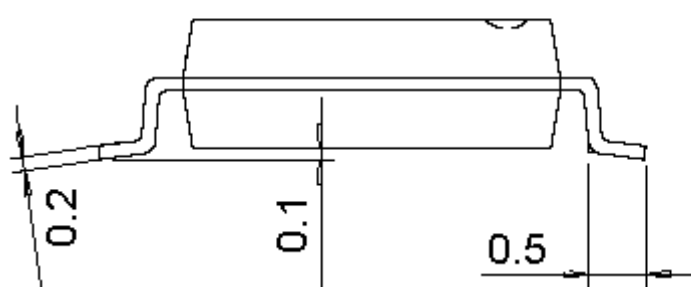
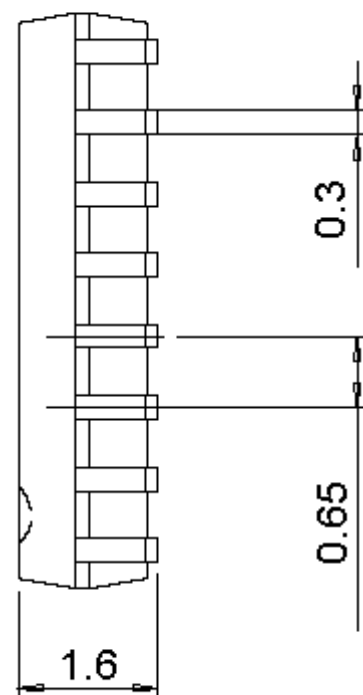
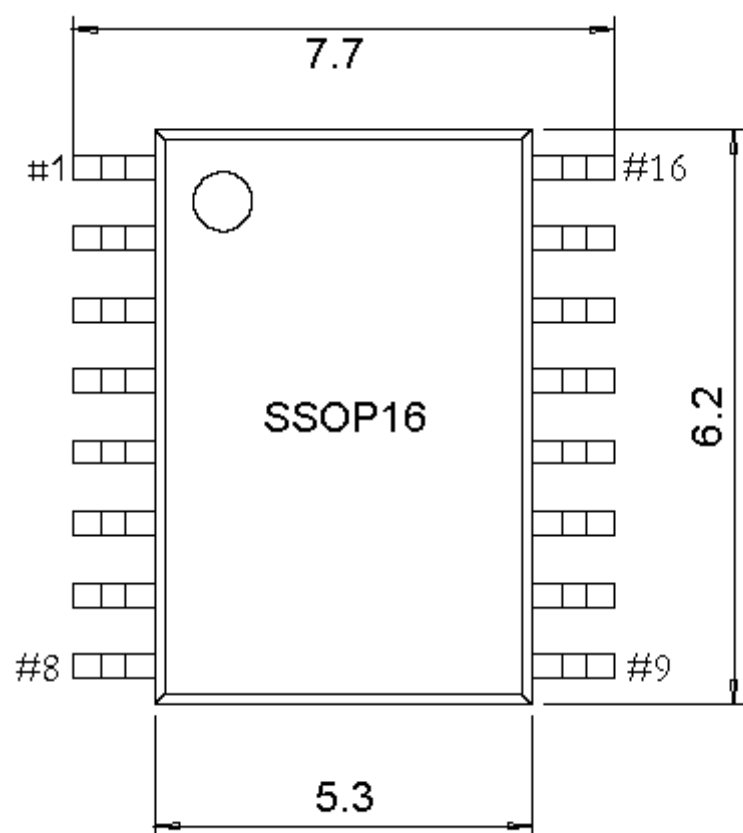


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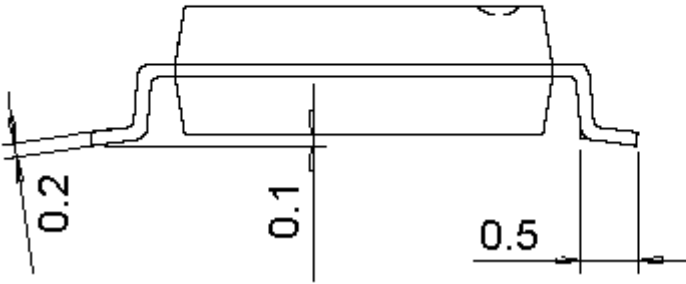
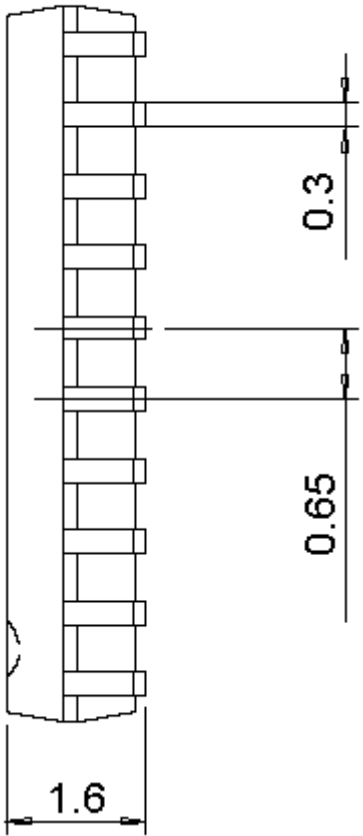
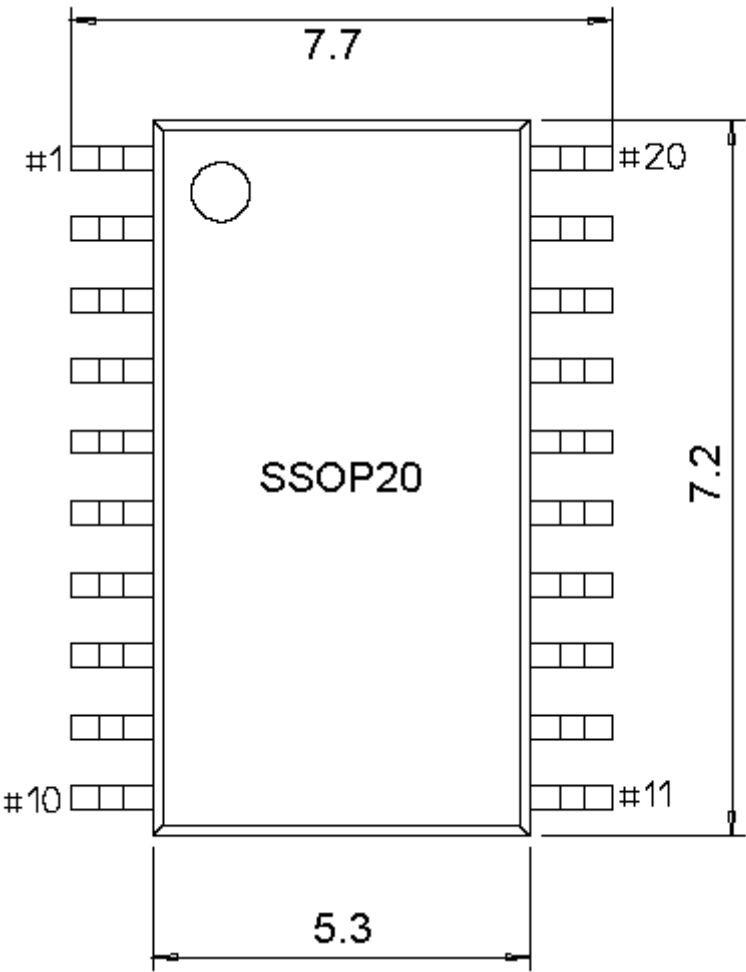


SSOP 类

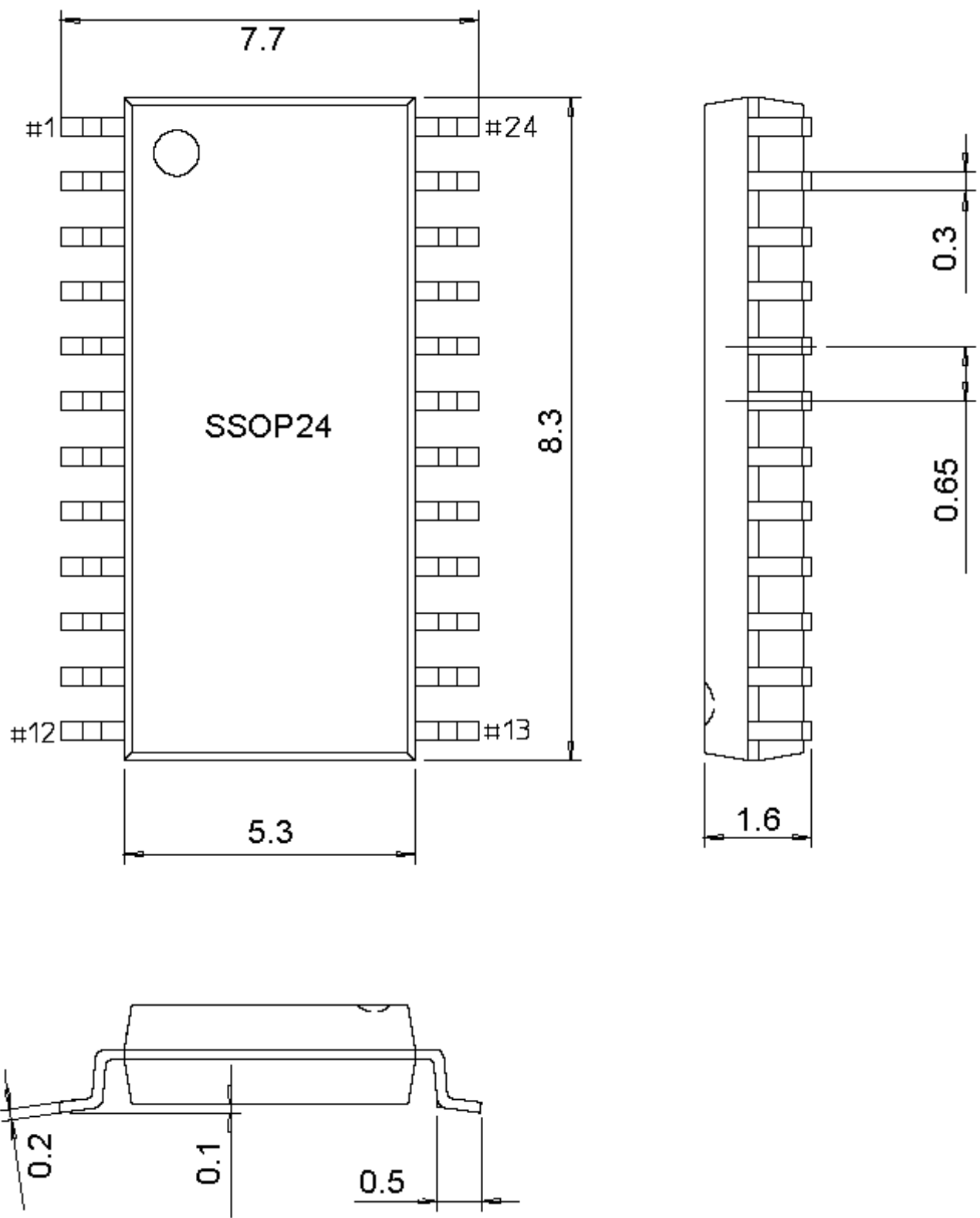
SSOP16



SSOP20



SSOP24

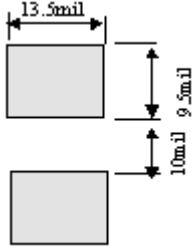
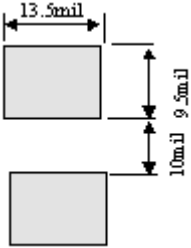
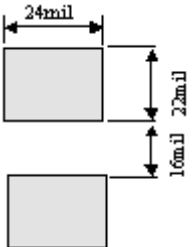
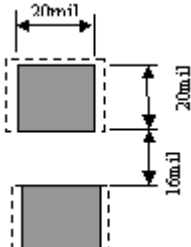
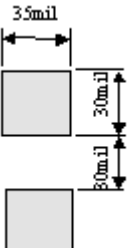
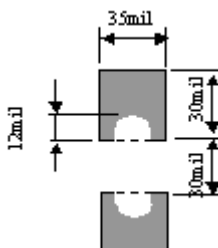
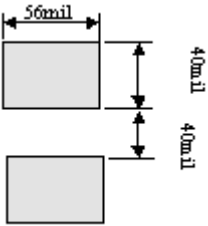
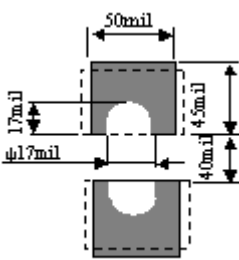
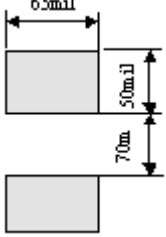
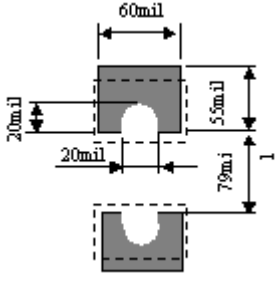


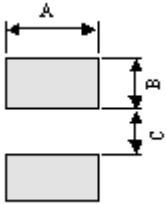
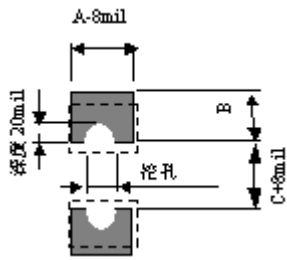
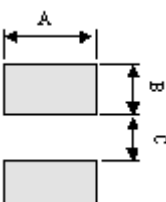
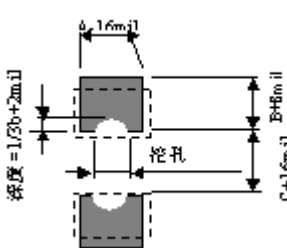
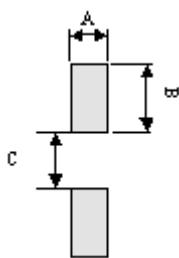
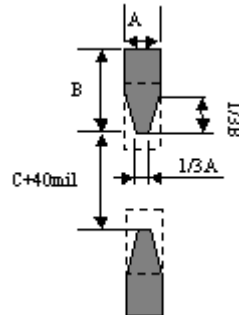
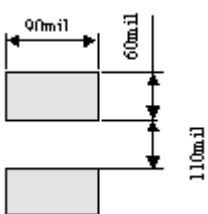
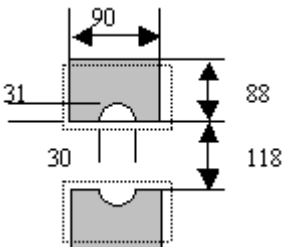
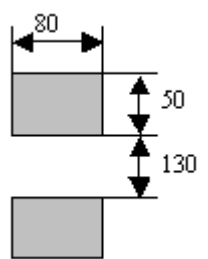
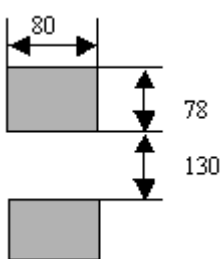
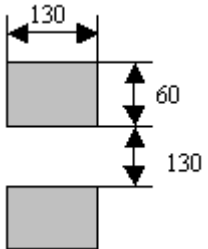
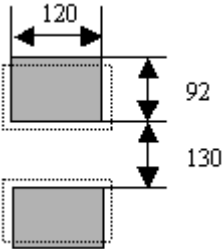
电阻电容类

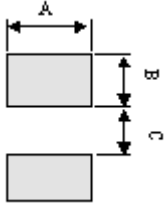
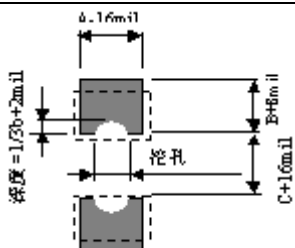
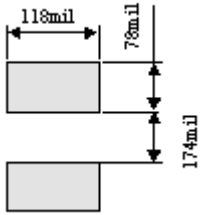
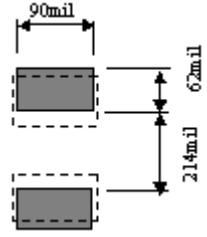
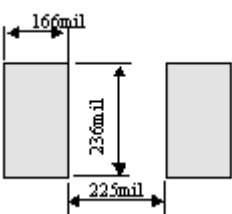
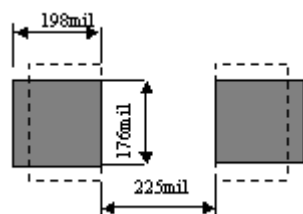
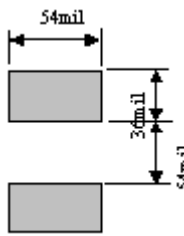
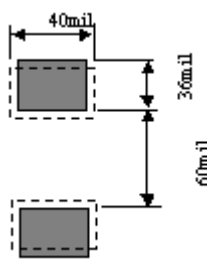
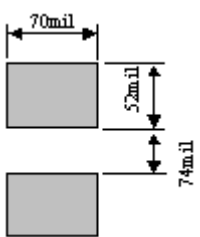
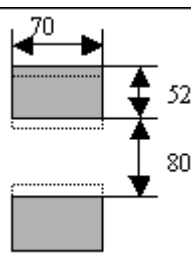
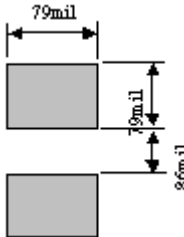
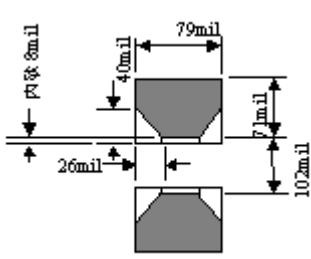
现在常用的电阻、电容、电感、二极管都有贴片封装。贴片封装用四位数字标识，表明了器件的长度和宽度。贴片电阻有百分五和百分一两种精度，购买时不特别说明的话就是指百分五。一般说的贴片电容是片式多层陶瓷电容（MLCC），也称独石电容。附表是贴片电阻的参数。

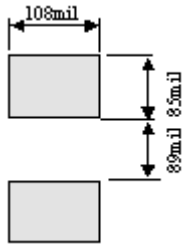
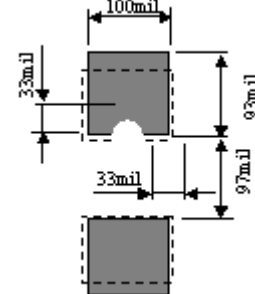
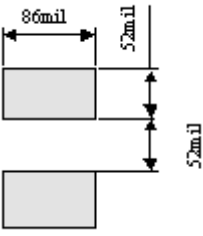
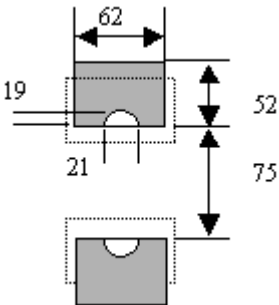
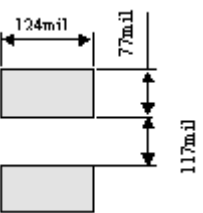
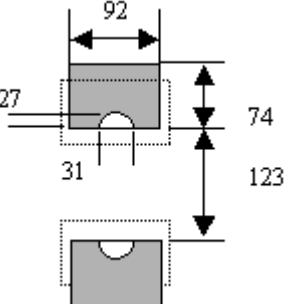
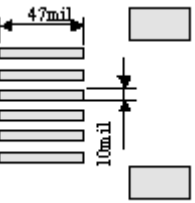
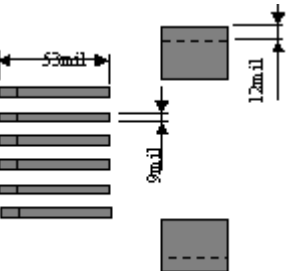
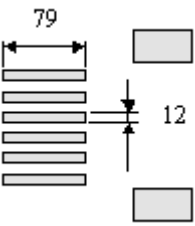
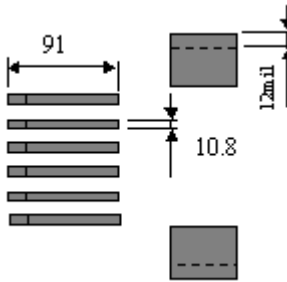
英制 (mil)	公制 (mm)	长(L) (mm)	宽(W) (mm)	高(t) (mm)	a (mm)	b (mm)	常规 功率 W	提升 功率 W	最大 工作 电压 V
0201	0603	0.60±0.05	0.30±0.05	0.23±0.05	0.10±0.05	0.15±0.05	1/20		25
0402	1005	1.00±0.10	0.50±0.10	0.30±0.10	0.20±0.10	0.25±0.10	1/16		50
0603	1608	1.60±0.15	0.80±0.15	0.40±0.10	0.30±0.20	0.30±0.20	1/16	1/10	50
0805	2012	2.00±0.20	1.25±0.15	0.50±0.10	0.40±0.20	0.40±0.20	1/10	1/8	150
1206	3216	3.20±0.20	1.60±0.15	0.55±0.10	0.50±0.20	0.50±0.20	1/8	1/4	200
1210	3225	3.20±0.20	2.50±0.20	0.55±0.10	0.50±0.20	0.50±0.20	1/4	1/3	200
1812	4832	4.50±0.20	3.20±0.20	0.55±0.10	0.50±0.20	0.50±0.20	1/2		200
2010	5025	5.00±0.20	2.50±0.20	0.55±0.10	0.60±0.20	0.60±0.20	1/2	3/4	200
2512	6432	6.40±0.20	3.20±0.20	0.55±0.10	0.60±0.20	0.60±0.20	1		200

SMD 元件焊盘尺寸设计参考

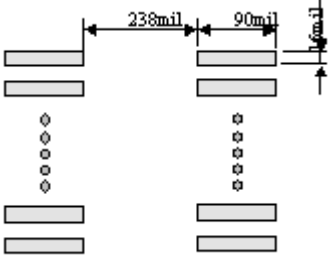
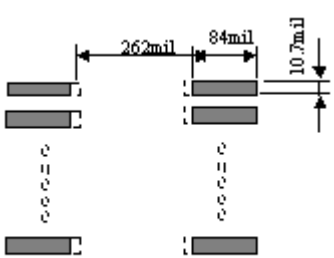
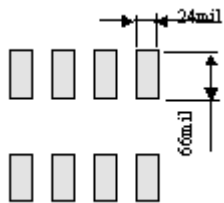
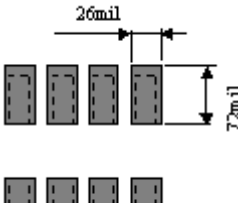
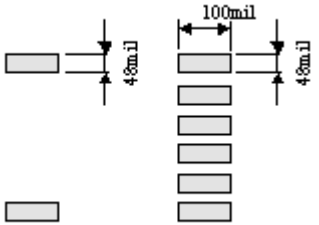
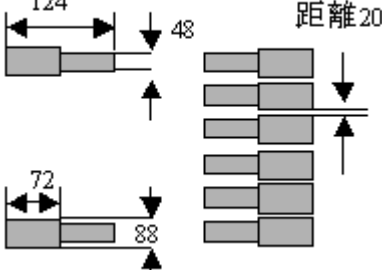
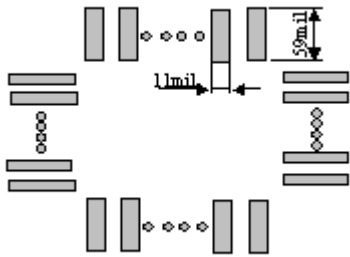
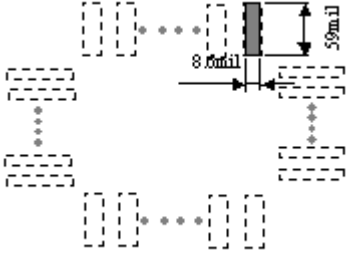
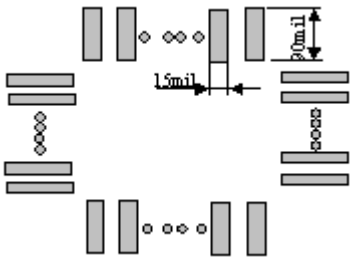
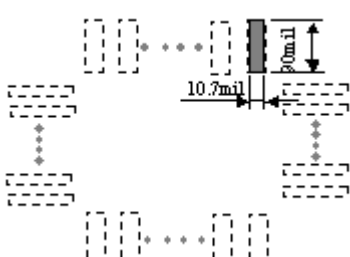
序号	元件类型	PAD 尺寸	对应钢板开孔尺寸	说明
1	0201 chip			X: →13.5mil Y: →9.5mil 开孔尺寸不变
2	0402 chip			X: 24→20mil Y: 22→20mil 内距不变
3	0603 chip			X、Y、内距都不变 半圆槽直径→17mil
4	0805 chip			X: 56→50mil Y: 40→45mil 半圆槽直径→17mil
5	1206 chip			X: 65→60mil Y: 50→55mil 半圆槽直径→20mil 内距:79mil

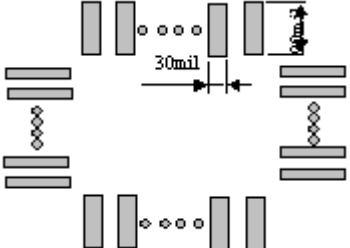
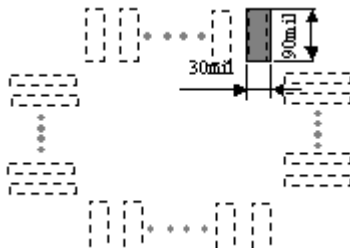
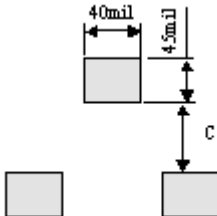
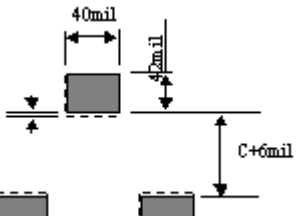
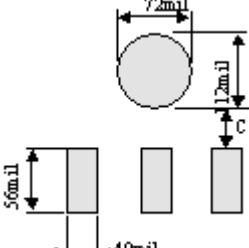
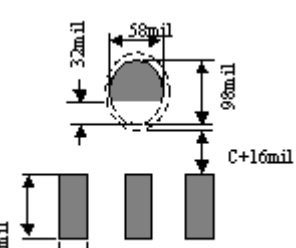
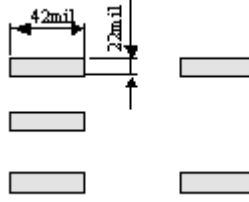
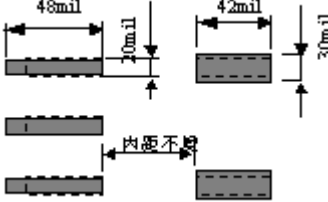
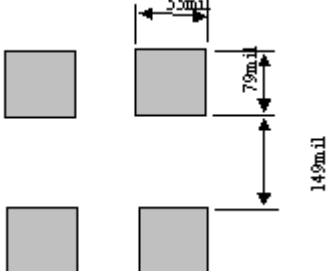
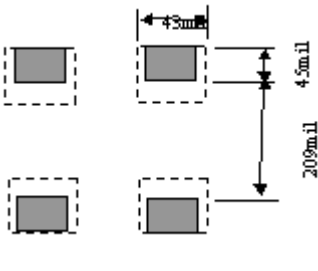
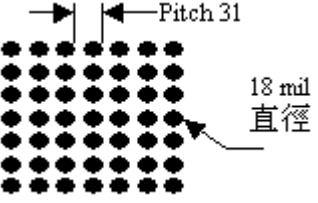
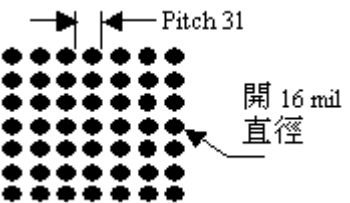
6	大于 1206 电阻			X: 減 8mil Y: 不变 内距: C+8mil 挖孔=1/3A 深度: 20mil
7	大于 1206 电容 代号 C 系列			X: A-16mil Y: B+8mil 内距: C+16mil 挖孔= 1/3A 深度 = 1/3B+2mil
8	Alumin 铝质电容			削成六角形
9	(大型) 高压电容 内距=110mil			X: 不变 Y: 60→88mil 内距: 110→118mil 半圆槽直径 30mil 深度 31 mil
10	(大型) 高压电容 内距=130mil			X: 不变 Y: 50→78mil 内距: 130 不变
11	(大型) 高压电容 内距=130mil			X: 130→120 mil Y: 60→92 mil 内距: 130 不变

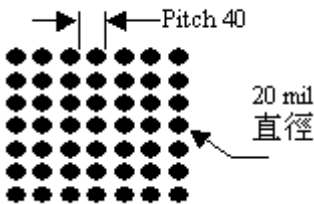
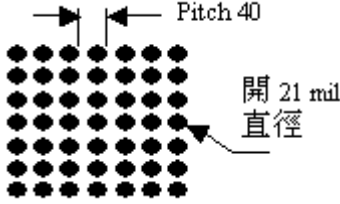
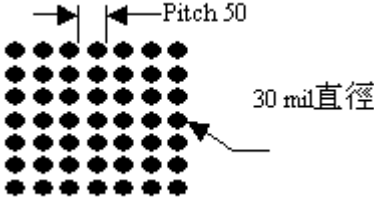
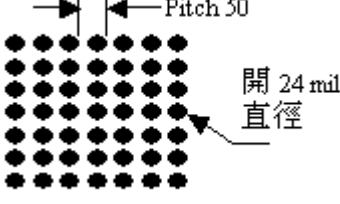
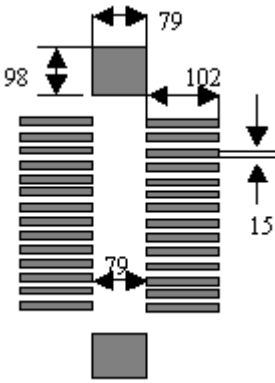
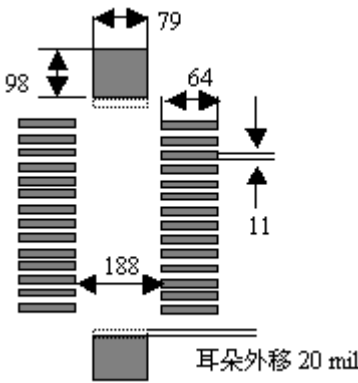
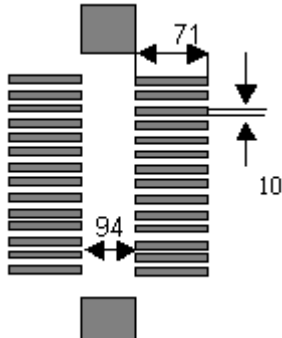
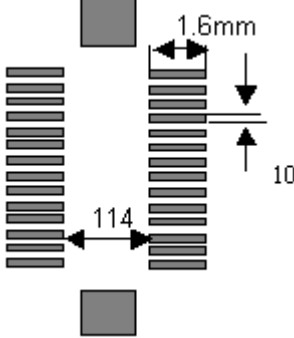
12	(圆型) 高压电容 内距=110mil			X: A-16mil Y: B+8mil 内距: C+16mil 挖孔 = 1/3A 深度 = 1/3B+2mil
13	(小型) 黑色圆形电 感器件 代号 L			X: 118→90mil Y: 78→62mil 内距: 174→214mil
14	(大型) 黑色圆形电 感器件 代号 L			X: 166→198mil Y: 236→176mil 内距不变
15	Diode (小型)			X: 54→40mil Y: 不变 内距: 54→60mil
16	Diode (中型)			X: 不变 Y: 不变 内距: 74→80mil
17	Diode (大型)			X: 不变 Y: 79→71mil(内砍 8mil) 内边: 导角 40x26mil 内边: 内砍 8mil 内距: 86→102mil

18	VARITER 零件 代号 RV1			X: 108→100mil Y: 85→93mil 内距: 89→97mil 挖孔: 33mil 深度: 33mil
19	FUSE 保险丝 1026 (不含) 以下			X: 86→62mil Y: 不变 内距: 52→75mil 半圆槽直径 21mil 深度 19mil
20	FUSE 保险丝 1026 (不含) 以上			X: 124→92mil Y: 77→74mil 内距: 117→123mil 半圆槽直径 31mil 深度 27mil
21	Connector 0.5Pitch			Y: 10 → 9mil X 外加 6 mil 由 47→53mil 耳朵后加 12mil
22	Connector 0.65Pitch			Y: 12 mil→10.8 mil X: 外加 12 mil 耳朵后加 12mil

23	Connector 1.0 Pitch			宽: 24→20mil X 外加:8mil 110→118mil 耳朵后加 12mil
24	Connector 1.27 Pitch			宽: 30→26mil X 外加:12mil 74mil→86mil 耳朵后加 12mil
25	排阻 RN			X: 18→15mil Y: 42→50mil 内距:不变
26	六脚 IC 0.65 pitch			外四脚: X: 12→13.5mil Y: 36→45mil 内二脚: X: 12→11.5mil Y: 36→45mil 内距:不变
27	SOIC 0.5 pitch			X: 不变 Y: 12 → 8.6mil 内距: 不变

28	SOIC 0.65pitch			X:: 90 → 84mil Y:: 16 → 10.7mil 内距:: 238→262mil
29	SOIC 1.27 pitch			X: 24→26mil Y: 66 → 72mil 内距: 不变
30	变压器			右 pinX: 100 → 124mil 左 2pinX 外加:: 24 mil Y: 48 → 64mil 内距: 不变
31	QFP 0.5pitch			X:: 11mil → 8.6mil Y: 不变
32	QFP 0.65pitch			X: 15mil→10.7mil Y: 不变

33	PLCC			X: 不变 Y: 不变
34	三脚 电晶体			内砍: 3mil X: 不变 Y: 45→42mil 内距: C+6mil
35	四脚 电晶体			椭圆形外移 16mil 椭圆短径缩: 112→98mil 椭圆短径缩: 72→58mil 椭圆长径下砍: 1/3:32mil
36	五脚 电晶体			前 3 脚 X: 42→48mil 往外: 6mil 前 3 脚 Y: 22→20mil 后 2 脚 X: 42→42mil 后 2 脚 Y: 22→30mil
37	Crystal 振荡器			X: 55 → 43mil Y: 79 → 45mil 内距: 149→209mil
38	BGA 0.80mm Pitch			原寸: 直径 18 mil 开孔: 直径 16 mil

39	BGA 1.00mm Pitch			原寸: 直径 20 mil 开孔: 直径 21 mil
40	BGA 1.27mm Pitch			原寸: 直径 30 mil 开孔: 直径 24 mil
41	J1 Connector			耳朵原寸外移 20 mil 尺寸如图示
42	CN1 Connector (K02I024 J07I037 SERIES)			其余单位为 mil

540 编 2006 年 3 月 25 日

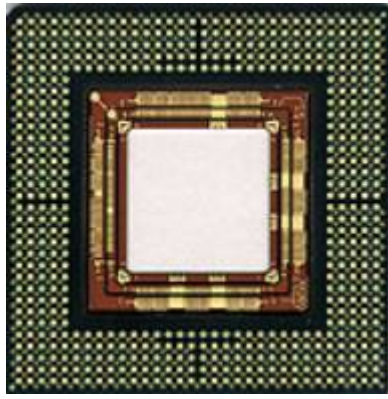
精度为 5%的碳膜电阻，以欧姆为单位的标称值：

1.0	5.6	33	160	820	3.9K	20K	100K	510K	2.7M
1.1	6.2	36	180	910	4.3K	22K	110K	560K	3M
1.2	6.8	39	200	1K	4.7K	24K	120K	620K	3.3M
1.3	7.5	43	220	1.1K	5.1K	27K	130K	680K	3.6M
1.5	8.2	47	240	1.2K	5.6K	30K	150K	750K	3.9M
1.6	9.1	51	270	1.3K	6.2K	33K	160K	820K	4.3M
1.8	10	56	300	1.5K	6.6K	36K	180K	910K	4.7M
2.0	11	62	330	1.6K	7.5K	39K	200K	1M	5.1M
2.2	12	68	360	1.8K	8.2K	43K	220K	1.1M	5.6M
2.4	13	75	390	2K	9.1K	47K	240K	1.2M	6.2M
2.7	15	82	430	2.2K	10K	51K	270K	1.3M	6.8M
3.0	16	91	470	2.4K	11K	56K	300K	1.5M	7.5M
3.3	18	100	510	2.7K	12K	62K	330K	1.6M	8.2M
3.6	20	110	560	3K	13K	68K	360K	1.8M	9.1M
3.9	22	120	620	3.2K	15K	75K	390K	2M	10M
4.3	24	130	680	3.3K	16K	82K	430K	2.2M	15M
4.7	27	150	750	3.6K	18K	91K	470K	2.4M	22M
5.1	30								

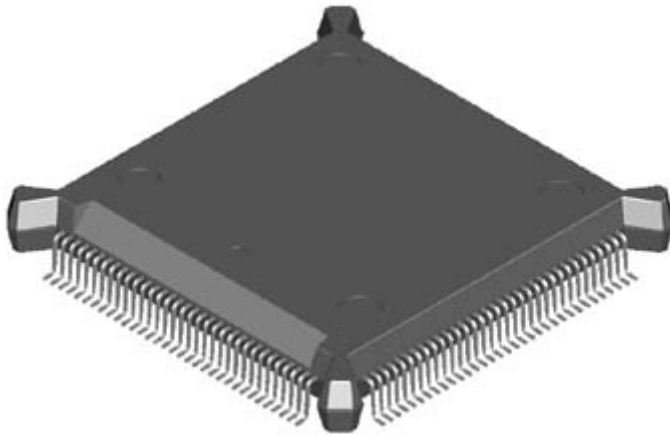
精度为 1%的金属膜电阻，以欧姆为单位的标称值：

10	33	100	332	1K	3.32K	10.5K	34K	107K	357K
10.2	33.2	102	340	1.02K	3.4K	10.7K	34.8K	110K	360K
10.5	34	105	348	1.05K	3.48K	11K	35.7K	113K	365K
10.7	34.8	107	350	1.07K	3.57K	11.3K	36K	115K	374K
11	35.7	110	357	1.1K	3.6K	11.5K	36.5K	118K	383K
11.3	36	113	360	1.13K	3.65K	11.8K	37.4K	120K	390K
11.5	36.5	115	365	1.15K	3.74K	12K	38.3K	121K	392K
11.8	37.4	118	374	1.18K	3.83K	12.1K	39K	124K	402K
12	38.3	120	383	1.2K	3.9K	12.4K	39.2K	127K	412K
12.1	39	121	390	1.21K	3.92K	12.7K	40.2K	130K	422K
12.4	39.2	124	392	1.24K	4.02K	13K	41.2K	133K	430K
12.7	40.2	127	402	1.27K	4.12K	13.3K	42.2K	137K	432K
13	41.2	130	412	1.3K	4.22K	13.7K	43K	140K	442K
13.3	42.2	133	422	1.33K	4.32K	14K	43.2K	143K	453K
13.7	43	137	430	1.37K	4.42K	14.3K	44.2K	147K	464K
14	43.2	140	432	1.4K	4.53K	14.7K	45.3K	150K	470K
14.3	44.2	143	442	1.43K	4.64K	15K	46.4K	154K	475K
14.7	45.3	147	453	1.47K	4.7K	15.4K	47K	158K	487K
15	46.4	150	464	1.5K	4.75K	15.8K	47.5K	160K	499K
15.4	47	154	470	1.54K	4.87K	16K	48.7K	162K	511K
15.8	47.5	158	475	1.58K	4.99K	16.2K	49.9K	165K	523K

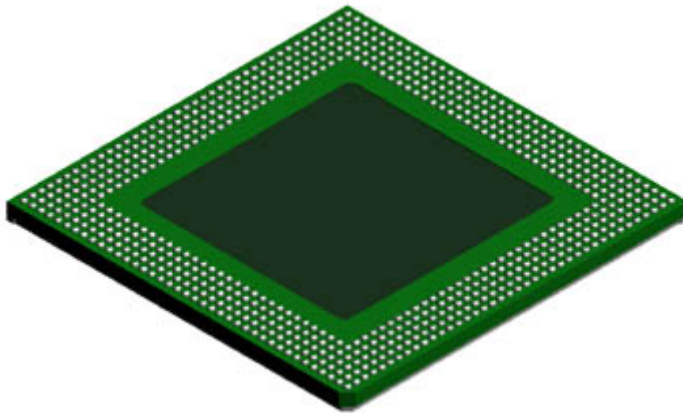
16	48.7	160	487	1.6K	5.1K	16.5K	51K	169K	536K
16.2	49.9	162	499	1.62K	5.11K	16.9K	51.1K	174K	549K
16.5	51	165	510	1.65K	5.23K	17.4K	52.3K	178K	560K
16.9	51.1	169	511	1.69K	5.36K	17.8K	53.6K	180K	562K
17.4	52.3	174	523	1.74K	5.49K	18K	54.9K	182K	576K
17.8	53.6	178	536	1.78K	5.6K	18.2K	56K	187K	590K
18	54.9	180	549	1.8K	5.62K	18.7K	56.2K	191K	604K
18.2	56	182	560	1.82K	5.76K	19.1K	57.6K	196K	619K
18.7	56.2	187	562	1.87K	5.9K	19.6K	59K	200K	620K
19.1	57.6	191	565	1.91K	6.04K	20K	60.4K	205K	634K
19.6	59	196	578	1.96K	6.19K	20.5K	61.9K	210K	649K
20	60.4	200	590	2K		6.2K	21K	62K	215K
665K									
20.5	61.9	205	604	2.05K	6.34K	21.5K	63.4K	220K	680K
21	62	210	619	2.1K		6.49K	22K	64.9K	221K
681K									
21.5	63.4	215	620	2.15K	6.65K	22.1K	66.5K	226K	698K
22	64.9	220	634	2.2K	6.8K	22.6K	68K	232K	715K
22.1	66.5	221	649	2.21K	6.81K	23.2K	68.1K	237K	732K
22.6	68	226	665	2.26K	6.98K	23.7K	69.8K	240K	750K
23.2	68.1	232	680	2.32K	7.15K	24K	71.5K	243K	768K
23.7	69.8	237	681	2.37	7.32K	24.3K	73.2K	249K	787K
24	71.5	240	698	2.4K	7.5K	24.9K	75K	255K	806K
24.3	73.2	243	715	2.43K	7.68K	25.5K	76.8K	261K	820K
24.7	75	249	732	2.49K	7.87K	26.1K	78.7K	267K	825K
24.9	75.5	255	750	2.55K	8.06K	26.7K	80.6K	270K	845K
25.5	76.8	261	768	2.61K	8.2K	27K	82K	274K	866K
26.1	78.7	267	787	2.67K	8.25K	27.4K	82.5K	280K	887K
26.7	80.6	270	806	2.7K	8.45K	28K	84.5K	287K	909K
27	82	274	820	2.74K	8.66K	28.7K	86.6K	294K	910K
27.4	82.5	280	825	2.8K	8.8K	29.4K	88.7K	300K	931K
28	84.5	287	845	2.87K	8.87K	30K	90.9K	301K	953K
28.7	86.6	294	866	2.94K	9.09K	30.1K	91K	309K	976K
29.4	88.7	300	887	3.0K	9.1K	30.9K	93.1K	316K	1.0M
30	90.9	301	909	3.01K	9.31K	31.6K	95.3K	324K	1.5M
30.1	91	309	910	3.09K	9.53K	32.4K	97.6K	330K	2.2M
30.9	93.1	316	931	3.16K	9.76K	33K	100K	332K	
31.6	95.3	324	953	3.24K	10K	33.2K	102K	340K	
32.4	97.6	330	976	3.3K	10.2K	33.6K	105K		



BGA

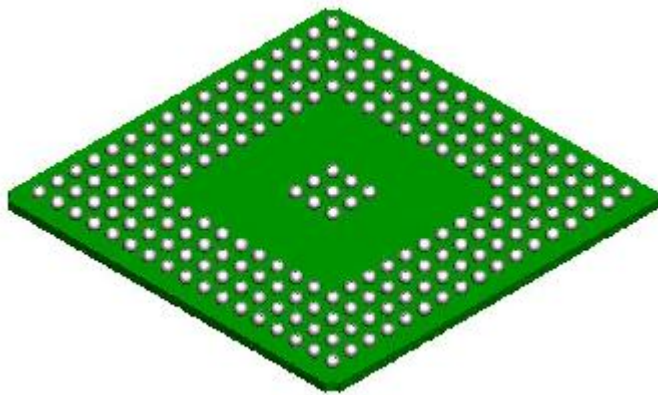
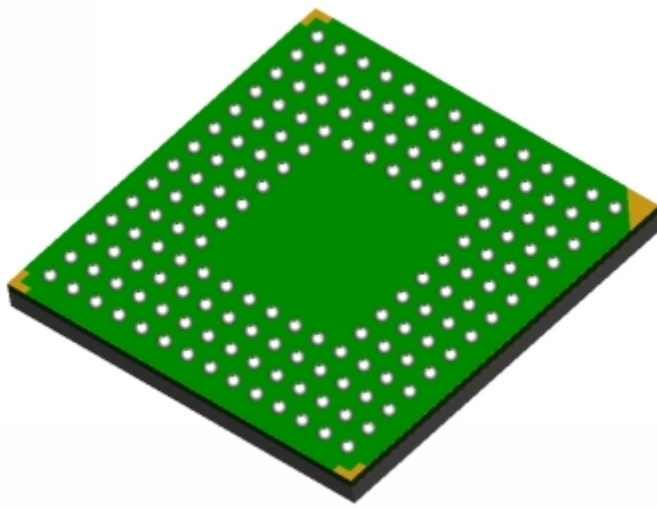


BQFP132

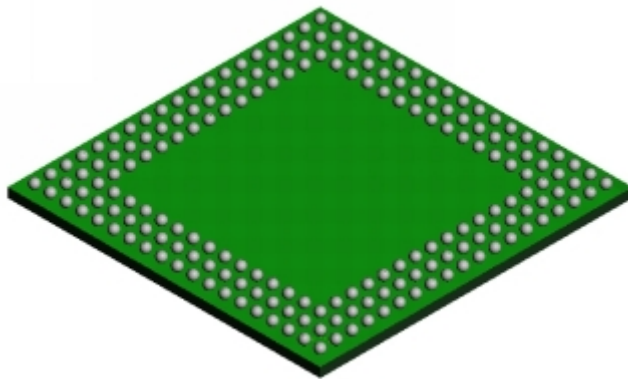


BGA

BGA

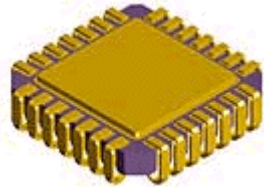
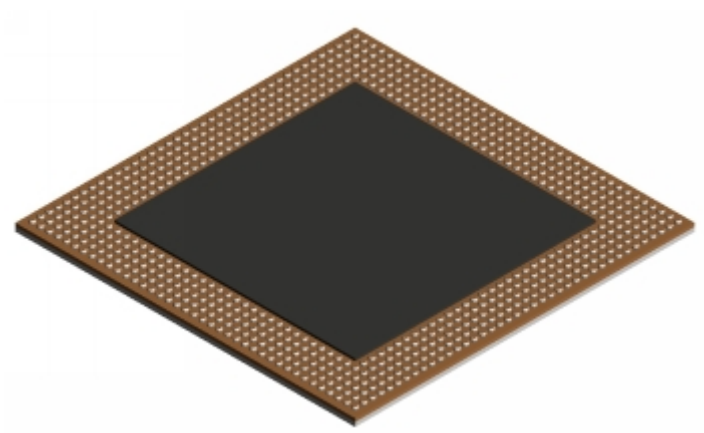


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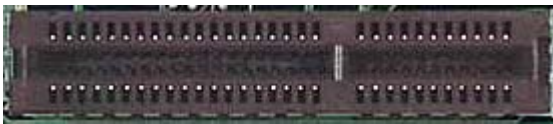


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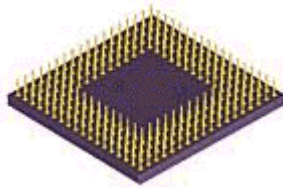
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CLCC



CNR



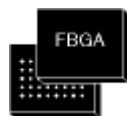
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DIP

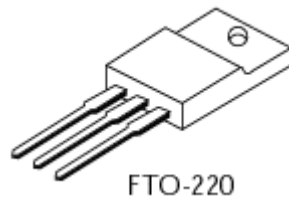
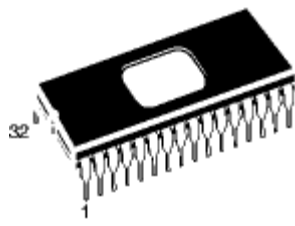


DIP-tab

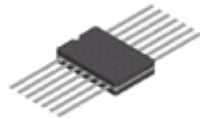


BGA

DIP

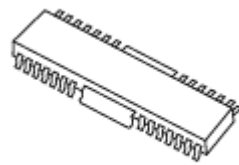


FTQ-220



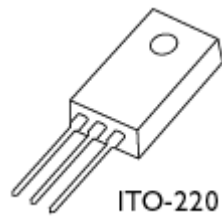
TO

Flat Pack



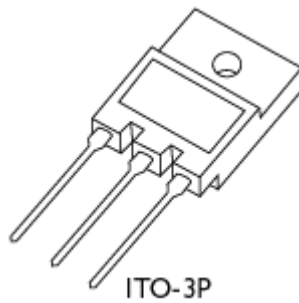
HSOP28

HSOP-28



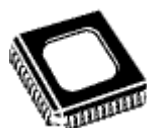
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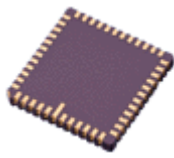


TO

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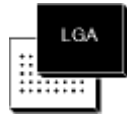
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LCC



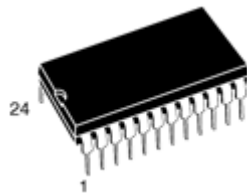
CLCC



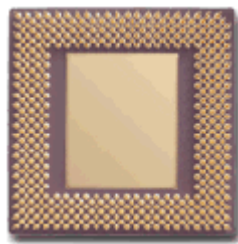
BGA



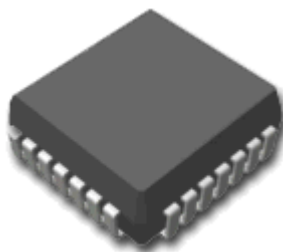
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DIP



PGA



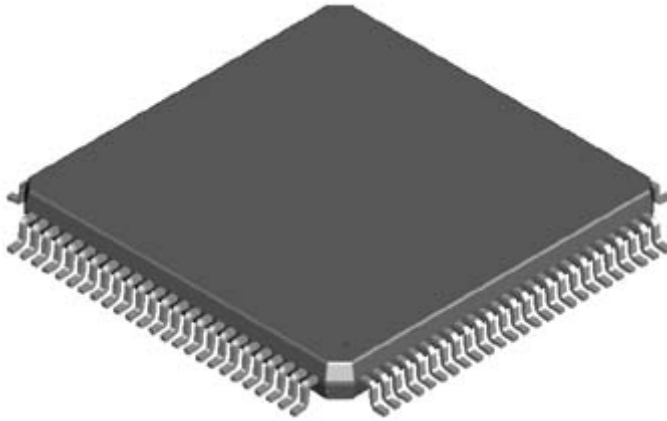
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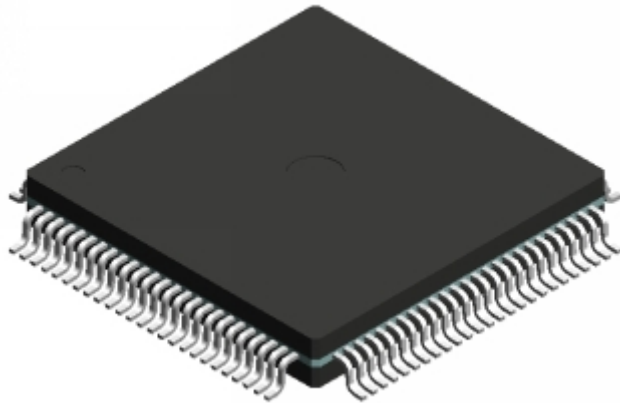
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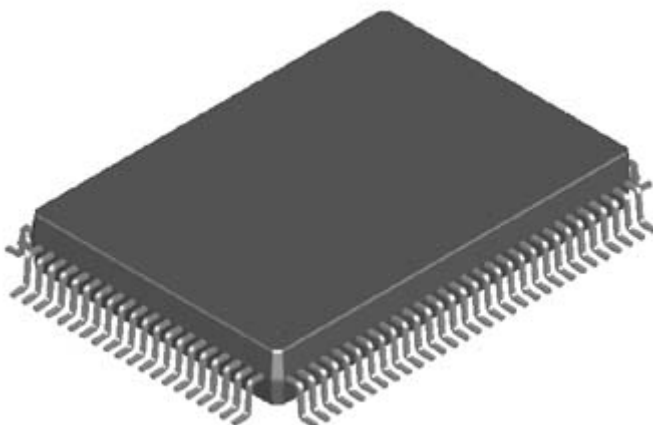
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LQFP

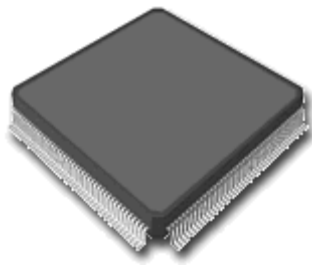


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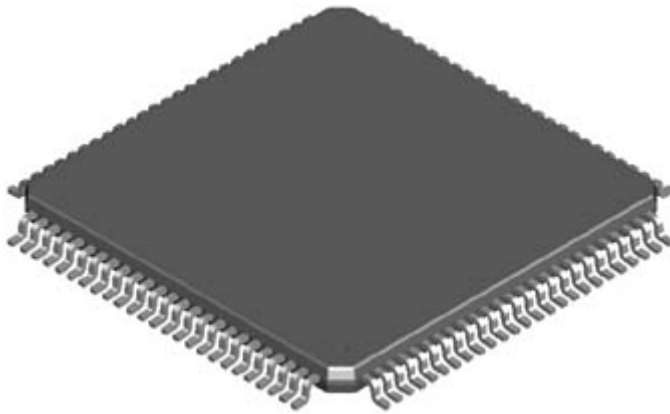


PQFP

QFP



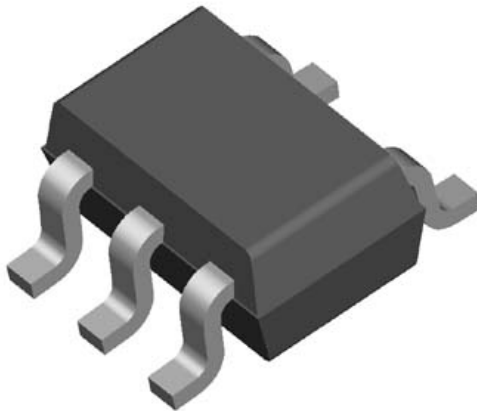
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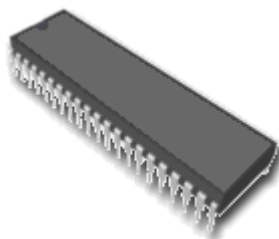
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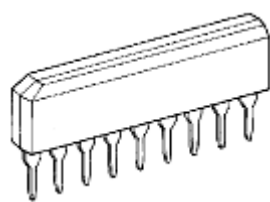
BGA



SC-70 5L



DIP



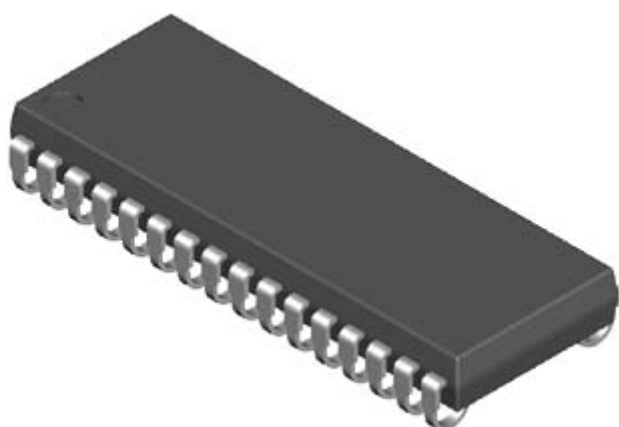
SIP



SO



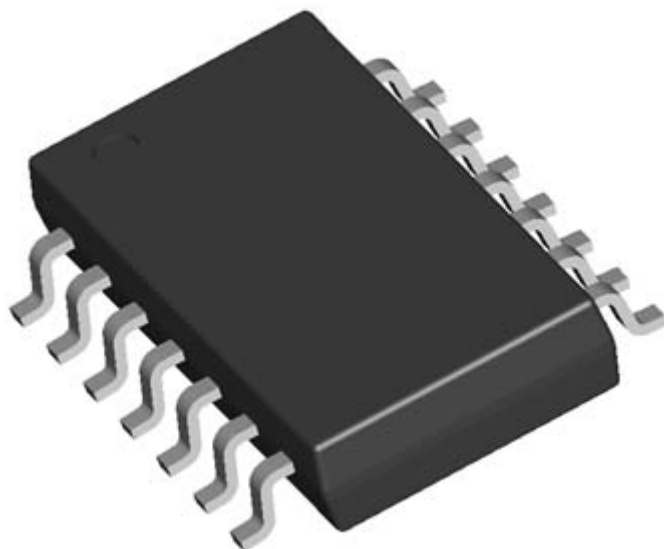
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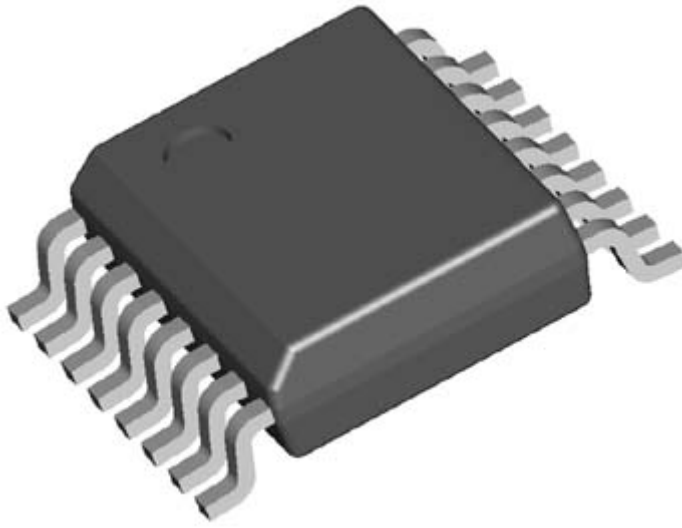
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SOP



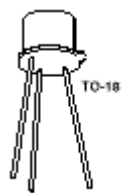
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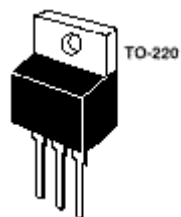
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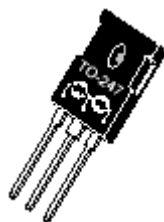
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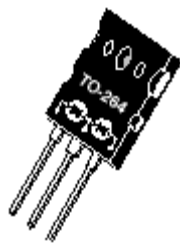
CAN



TO



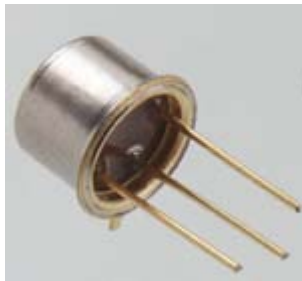
TO



TO



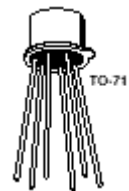
TO3



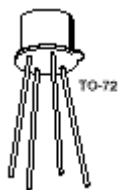
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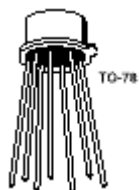
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CAN



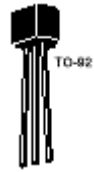
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CAN



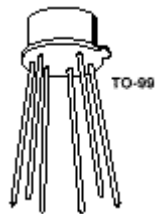
TO8



TO92



CAN



CAN



TSOP

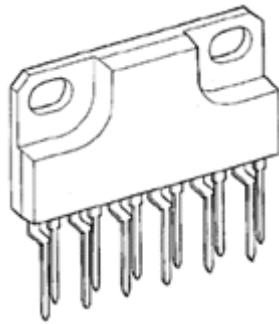
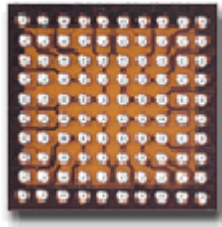


TSSOP or TSOP

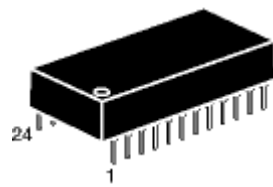


BGA

BGA



ZIP



PCDIP