

596-565/589/590/607

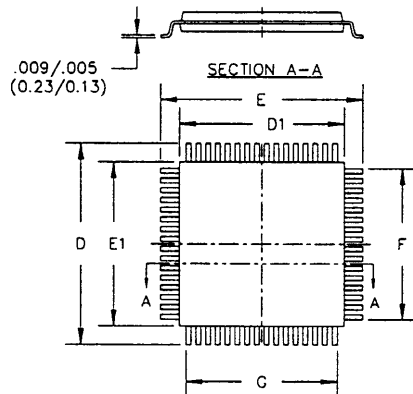
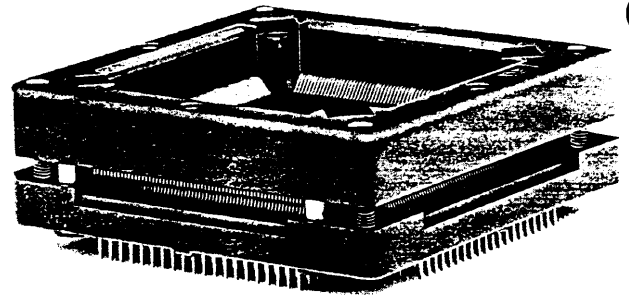

WELLS
ELECTRONICS

Burn-In/Test Sockets

Series 653 OTQFP Socket

Metric Quad Flat Pack featuring open-top ZIF design

- Top-actuated design facilitates manual or automatic loading.
- Low actuation force.
- Normally closed contacts.
- High normal force design.
- High reliability design incorporating return springs and corner rivets.



Note: Dimensions shown as inches (millimeters)

Part Number	Pkg Size (E1,D1)	Lead Count	Pitch (e)	Package Dimensions		
				Package Locating Dim.	D/E (Min/Max)	F/G (Min/Max)
653-0441212-100	10x10	44	.0315 (80)	.331/.338 (8.41/8.59)	.514/.526 (13.05/13.35)	.327/.331 (8.31/8.41)
653-0041212-300	10x10	44	.0315 (80)	.331/.334 (8.41/8.48)	.466/.478 (11.85/12.15)	.327/.331 (8.31/8.41)
653-0441212-301	10x10	44	.0315 (80)	.333/.336 (8.46/8.53)	.466/.478 (11.85/12.15)	.327/.331 (8.31/8.41)
653-0522212-100	10x10	52	.0256 (65)	.323/.326 (8.20/8.28)	.514/.526 (13.05/13.35)	.316/.324 (8.03/8.23)
653-0522212-300	10x10	52	.0256 (65)	.323/.326 (8.20/8.28)	.466/.478 (11.85/12.15)	.323/.325 (8.22/8.27)
653-0641412-500	14x14	64	.0315 (80)	.489/.492 (12.24/12.50)	.638/.654 (16.20/16.60)	.485/.489 (12.32/12.42)
653-0643212-100	10x10	64	.0197 (50)	.397/.402 (10.08/10.21)	.516/.524 (13.10/13.30)	.302/.307 (7.68/7.80)
653-0643212-300*	10x10	64	.0197 (50)	.417/.422 (10.59/10.72)	.466/.478 (11.85/12.15)	.302/.307 (7.68/7.80)
653-0643212-400	10x10	64	.0197 (50)	.397/.402 (10.08/10.21)	.490/.502 (12.45/12.75)	.302/.307 (7.68/7.80)
653-0802412-100	14x14	80	.0256 (65)	.504/.511 (12.80/12.98)	.671/.683 (17.05/17.35)	.495/.504 (12.58/12.80)
653-0802412-300	14x14	80	.0256 (65)	.504/.511 (12.80/12.98)	.624/.636 (15.85/16.15)	.495/.504 (12.58/12.80)
653-0803312-300	12x12	80	.0197 (50)	.476/.481 (12.09/12.22)	.545/.557 (13.84/14.15)	.381/.385 (9.68/9.78)
653-0803312-400	12x12	80	.0197 (50)	.476/.481 (12.09/12.22)	.569/.581 (14.45/14.76)	.381/.385 (9.68/9.78)
653-1003412-301	14x14	100	.0197 (50)	.481/.484 (12.22/12.29)	.624/.636 (15.85/16.15)	.476/.481 (12.09/12.22)
653-1003412-400	14x14	100	.0197 (50)	.481/.484 (12.22/12.29)	.648/.660 (16.45/16.75)	.476/.481 (12.09/12.22)
653-1002512-100	14x20	100	.0256 (65)	.501/.504 (12.73/12.80)	(D).667/.687 (16.94/17.45)	(F).497/.501 (12.62/12.73)
				.757/.760 (19.23/19.30)	(E).903/.923 (22.94/23.45)	(G).753/.757 (19.13/19.23)
653-1002512-300	14x20	100	.0256 (65)	.501/.504 (12.73/12.80)	(D).620/.640 (15.75/16.25)	(F).497/.501 (12.62/12.73)
				.757/.760 (19.23/19.30)	(E).856/.876 (21.74/22.25)	(G).753/.757 (19.13/19.23)
653-1201811-105	28x28	120	.0315 (80)	.933/.935 (23.70/23.75)	1.218/1.238 (30.94/31.45)	.924/.933 (23.47/23.70)
653-1201811-205	28x28	120	.0315 (80)	.933/.935 (23.70/23.75)	1.246/1.260 (31.65/32.00)	.924/.933 (23.47/23.70)
653-1283512-100	14x20	128	.0197 (50)	.501/.504 (12.73/12.80)	(D).667/.687 (16.94/17.45)	(F).499/.503 (12.67/12.77)
				.757/.760 (19.23/19.30)	(E).903/.923 (22.94/23.45)	(G).735/.739 (18.68/18.77)
653-1283512-300	14x20	128	.0197 (50)	.501/.504 (12.73/12.80)	(D).620/.640 (15.75/16.25)	(F).499/.503 (12.67/12.77)
				.757/.760 (19.23/19.30)	(E).856/.876 (21.74/22.25)	(G).735/.739 (18.68/18.77)
653-1281811-105	28x28	128	.0315 (80)	.996/1.000 (25.30/25.40)	1.218/1.238 (30.94/31.45)	.988/.997 (25.10/25.32)
653-1281811-205	28x28	128	.0315 (80)	.996/1.000 (25.30/25.40)	1.246/1.260 (31.65/32.00)	.988/.997 (25.10/25.32)
653-1442811-105	28x28	144	.0256 (65)	.913/.917 (23.19/23.29)	1.218/1.238 (30.94/31.45)	.905/.914 (22.99/23.22)
653-1442811-205	28x28	144	.0256 (65)	.913/.917 (23.19/23.29)	1.246/1.260 (31.65/32.00)	.905/.914 (22.99/23.22)
653-1602811-104	28x28	160	.0256 (65)	1.008/1.012 (25.60/25.70)	1.218/1.238 (30.94/31.45)	1.006/1.010 (25.55/25.65)
653-1602811-105	28x28	160	.0256 (65)	1.012/1.016 (25.70/25.81)	1.218/1.238 (30.94/31.45)	1.006/1.015 (25.55/25.78)
653-1602811-204	28x28	160	.0256 (65)	1.008/1.012 (25.60/25.70)	1.236/1.260 (31.39/32.00)	1.009/1.013 (25.63/25.73)
653-1602811-205	28x28	160	.0256 (65)	1.012/1.016 (25.70/25.81)	1.246/1.260 (31.65/32.00)	1.006/1.015 (25.55/25.78)
653-1843812-100*	28x28	184	.0197 (50)	.895/.898 (22.73/22.81)	1.222/1.234 (31.05/31.35)	.893/.894 (22.71/22.73)
653-1843812-400	28x28	184	.0197 (50)	.895/.898 (22.73/22.81)	1.199/1.211 (30.45/30.76)	.893/.894 (22.71/22.73)
653-2083812-100	28x28	208	.0197 (50)	1.013/1.016 (25.73/25.81)	1.222/1.234 (31.05/31.35)	1.009/1.013 (25.63/25.73)
653-2083812-110	28x28	208	.0197 (50)	1.014/1.017 (25.76/25.83)	1.222/1.234 (31.05/31.35)	1.009/1.013 (25.63/25.73)
653-2083812-410	28x28	208	.0197 (50)	1.015/1.018 (25.78/25.86)	1.199/1.211 (30.45/30.76)	1.009/1.013 (25.63/25.73)
653-2403912-403	32x32	240	.0197 (50)	1.170/1.173 (29.72/29.79)	1.356/1.368 (34.45/34.75)	1.167/1.169 (29.64/29.69)
653-2403912-409	32x32	240	.0197 (50)	1.172/1.175 (29.77/29.85)	1.356/1.368 (34.45/34.75)	1.167/1.169 (29.64/29.69)
653-3043A12-400	40x40	304	.0197 (50)	1.485/1.488 (37.72/37.80)	1.671/1.683 (42.45/42.75)	1.482/1.485 (37.64/37.72)
653-3043A12-403	40x40	304	.0197 (50)	1.486/1.489 (37.74/37.82)	1.671/1.683 (42.45/42.75)	1.482/1.485 (37.64/37.72)

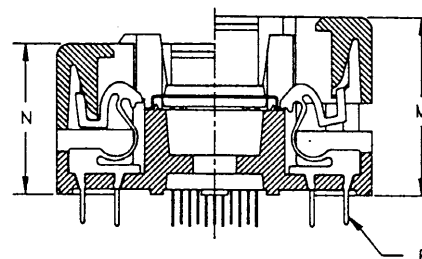
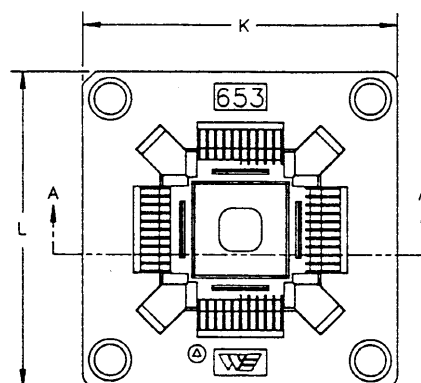
* Consult Factory



**WELLS
ELECTRONICS**

Burn-In/Test Sockets

Series 653 Footprints



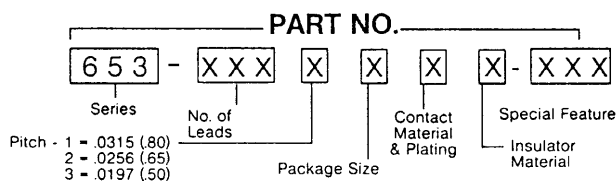
SECTION A-A

Note: Dimensions shown as inches (millimeters)

Part Number	Pkg Size (E1,D1)	Lead Count	Socket Dimensions				
			K	L	M	N	P
653-0441212-100	10x10	44	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0441212-300	10x10	44	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0441212-301	10x10	44	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0522212-100	10x10	52	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0522212-300	10x10	52	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0641412-500	14x14	64	1.347 (34.21)	1.347 (34.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0643212-100	10x10	64	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0643212-30X*	10x10	64	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0643212-400	10x10	64	1.189 (30.20)	1.189 (30.20)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0802412-100	14x14	80	1.347 (34.21)	1.347 (34.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0802412-300	14x14	80	1.347 (34.21)	1.347 (34.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0803312-300	12x12	80	1.268 (32.21)	1.268 (32.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-0803312-400	12x12	80	1.268 (32.21)	1.268 (32.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1003412-301	14x14	100	1.347 (34.21)	1.347 (34.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1003412-400	14x14	100	1.347 (34.21)	1.347 (34.21)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1002512-100	14x20	100	1.590 (40.39)	1.355 (34.42)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1002512-300	14x20	100	1.590 (40.39)	1.355 (34.42)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1201811-105	28x28	120	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1201811-205	28x28	120	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1283512-100	14x20	128	1.590 (40.39)	1.355 (34.42)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1283512-300	14x20	128	1.590 (40.39)	1.355 (34.42)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1281811-105	28x28	128	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1281811-205	28x28	128	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1442811-105	28x28	144	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1442811-205	28x28	144	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1602811-104	28x28	160	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1602811-105	28x28	160	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1602811-204	28x28	160	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1602811-205	28x28	160	2.165 (55.00)	2.165 (55.00)	.856/.876 (21.74/22.25)	.721 (18.31)	.010 x .020 (25 x .51)
653-1843812-100*	28x28	184	1.969 (50.00)	1.969 (50.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-1843812-400	28x28	184	1.969 (50.00)	1.969 (50.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-2083812-100	28x28	208	1.969 (50.00)	1.969 (50.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-2083812-110	28x28	208	1.969 (50.00)	1.969 (50.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-2083812-410	28x28	208	1.969 (50.00)	1.969 (50.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-2403912-403	32x32	240	2.216 (54.00)	2.216 (54.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-2403912-409	32x32	240	2.216 (54.00)	2.216 (54.00)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-3043A12-400	40x40	304	2.450 (62.23)	2.450 (62.23)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)
653-3043A12-403	40x40	304	2.450 (62.23)	2.450 (62.23)	.666/.686 (16.92/17.42)	.57 (14.48)	.015 x .008 (38 x 20)

* Consult Factory

DESCRIPTION & ORDERING INFORMATION



MATERIALS

Socket Body: U.L. 94V-0 rated high temperature material

Contacts: Beryllium copper alloy

Contact Plating: gold over nickel, or tin/lead over nickel

WELLS ELECTRONICS, INC. • 52940 OLIVE ROAD • SOUTH BEND, INDIANA 46628 • U.S.A. • (219) 287-5941 • FAX (219) 287-0356

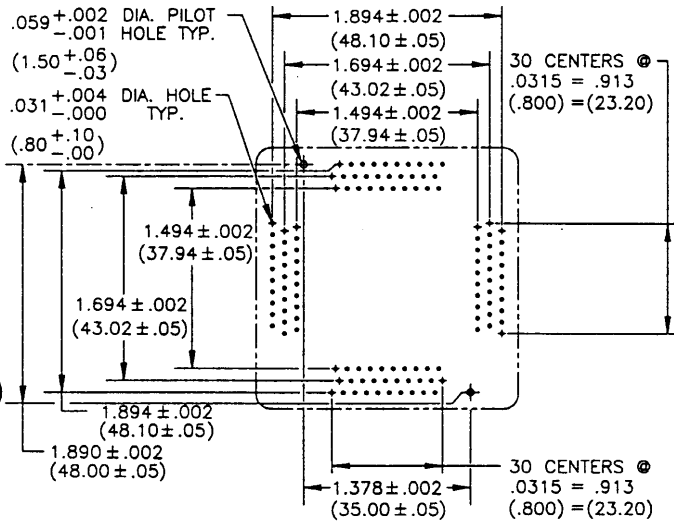


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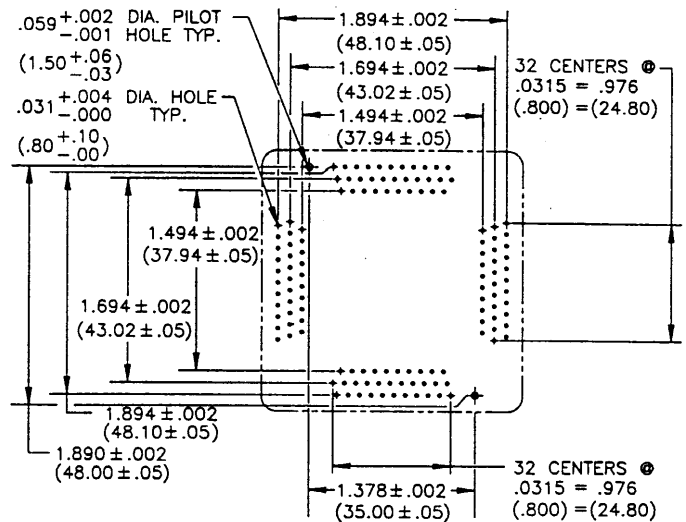
Burn-In/Test Sockets

Series 653 Footprints

120 PIN
Part No. 653-1201811-XXX

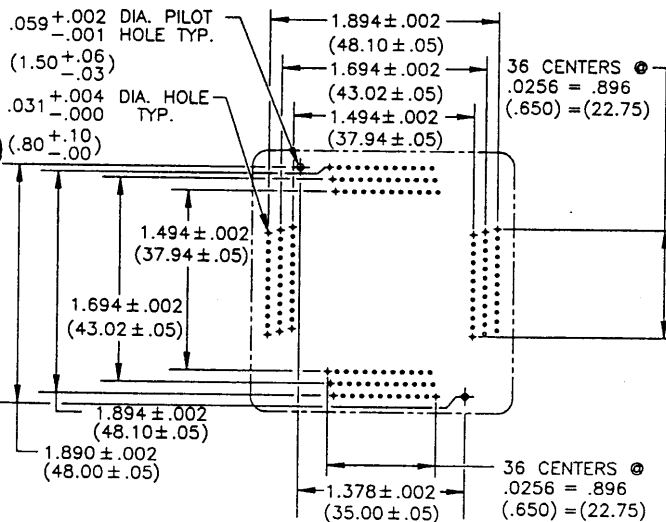


128 PIN
Part No. 653-1281811-XXX

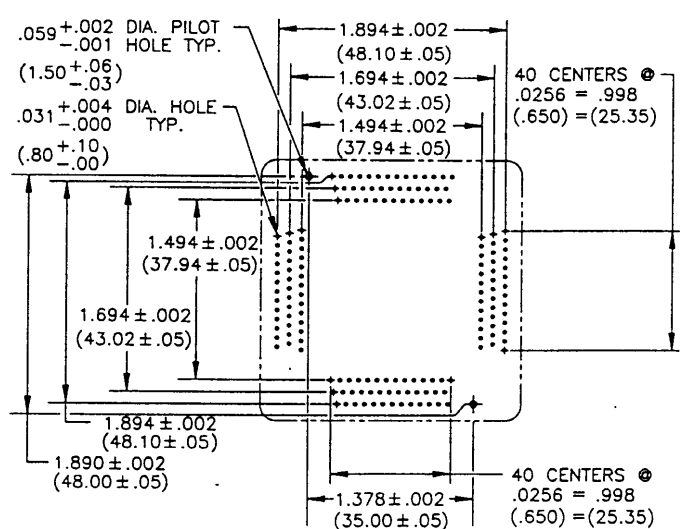


Footprint patterns are viewed from above
looking down through the sockets.

144 PIN
Part No. 653-1442811-XXX



160 PIN
Part No. 653-1602811-XXX



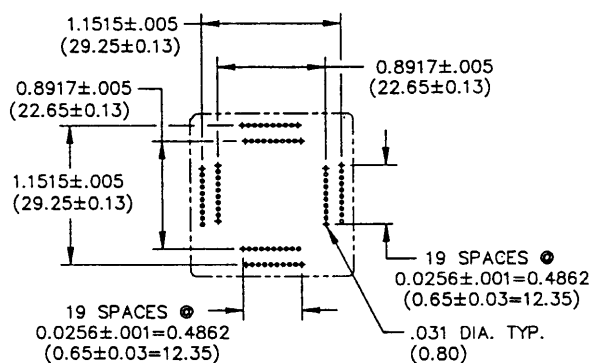


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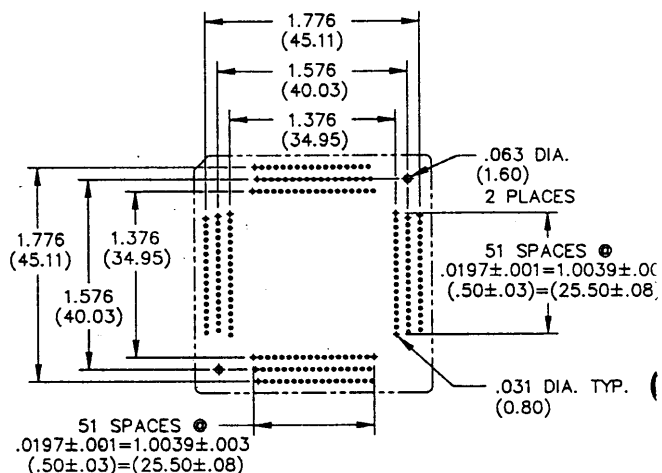
Burn-In/Test Sockets

Series 653 Footprints

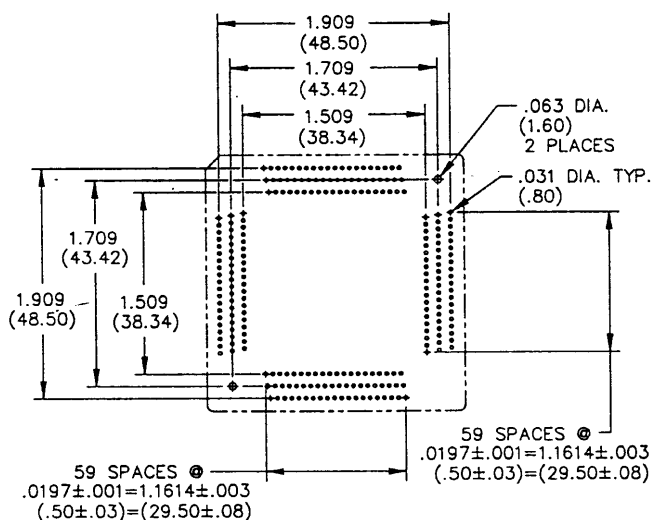
184 PIN
Part No. 653-1843812-XXX



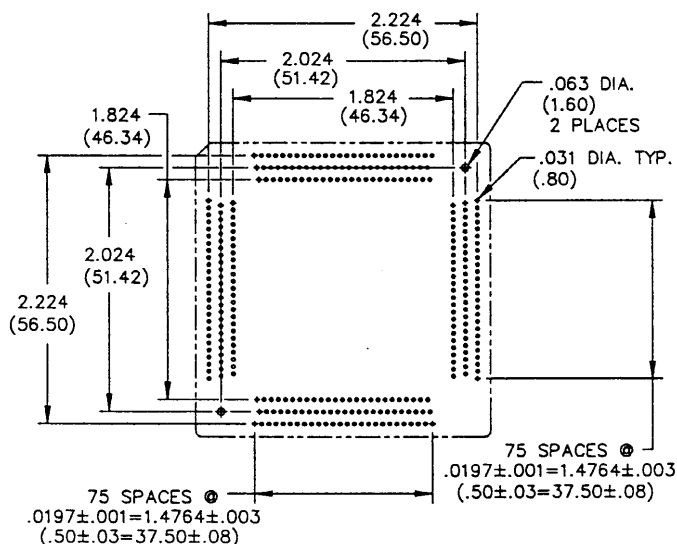
208 PIN
Part No. 653-2083812-XXX



240 PIN
Part No. 653-2403912-XXX



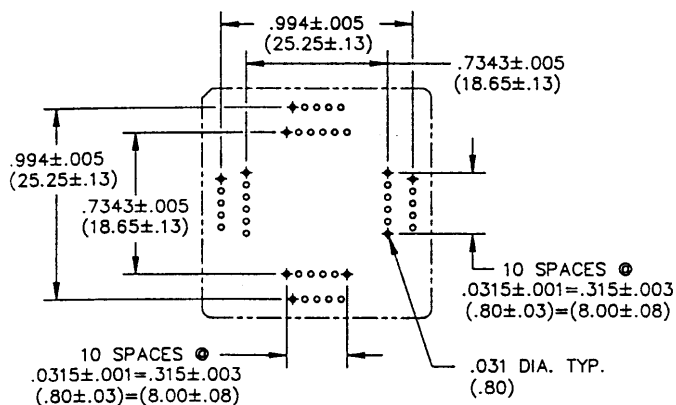
304 PIN
Part No. 653-3043A12-XXX



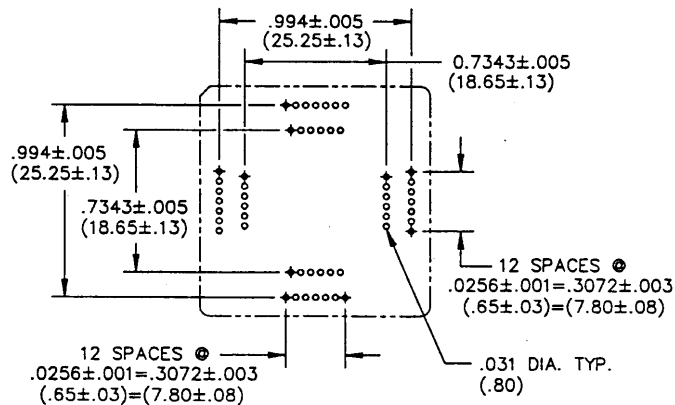
Footprint patterns are viewed from above
looking down through the sockets.

Series 653 Footprints

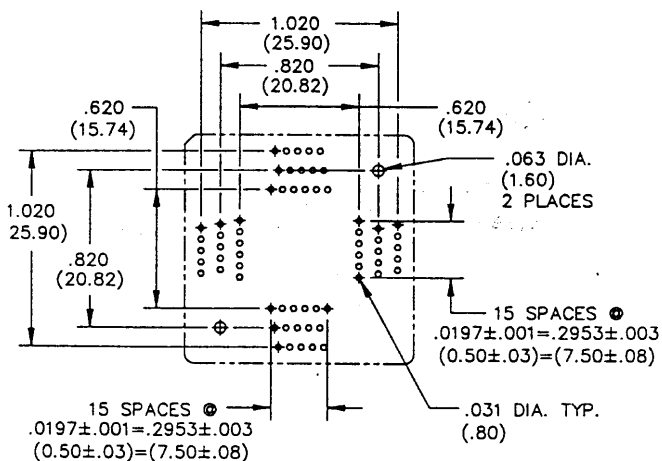
44 PIN
Part No. 653-0441212-XXX



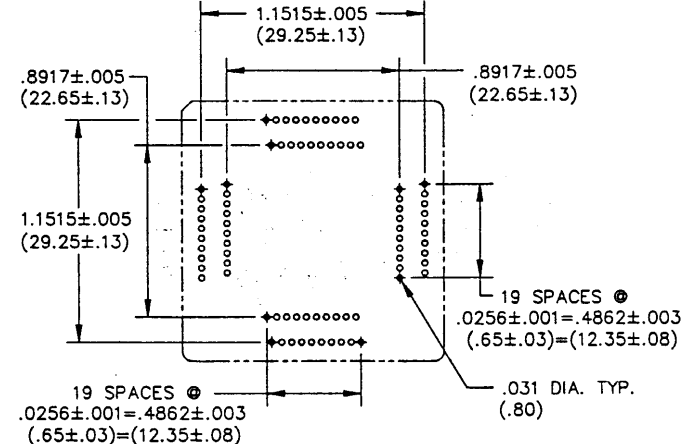
52 PIN
Part No. 653-0522212-XXX



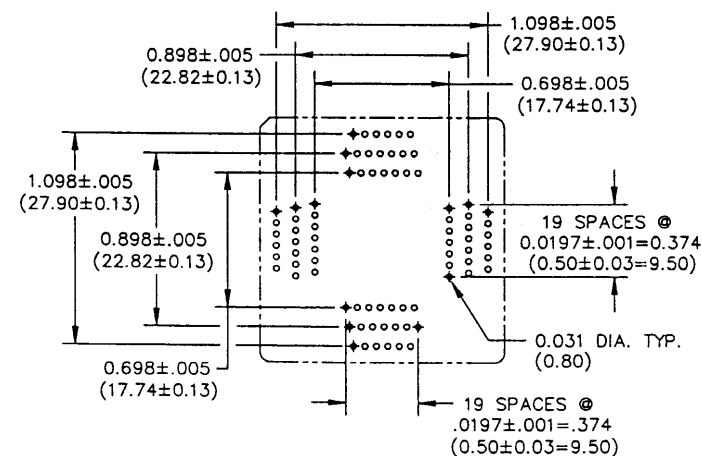
64 PIN
Part No. 653-0643212-XXX



80 PIN
Part No. 653-0802412-XXX



80 PIN
Part No. 653-0803312-XXX



Footprint patterns are viewed from above looking down through the sockets.

100 PIN
Part No. 653-1003412-XXX

