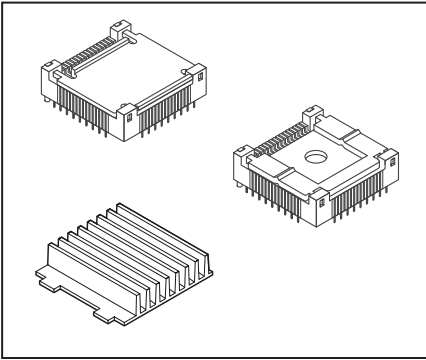


3M OEM Type "A" LCC Sockets



A



Features:

- Accepts JEDEC leadless type "A" ceramic chip carriers
- Variety of lid options available
- "U" lid for I.C.E. adapter I/O cable egress
- Heat Sink(s) acceptable and available
- Thruster spring helps register substrate three corner notches, maintain centering
- Polarizing post on bottom of socket
- Through hole contact tails
- No tools required for package insertion/removal
- Full contact probe-ability
- High temperature PPS plastic and BeCu contacts for rugged performance

Physical Specifications:

- Insulation: Material: Glass Filled Polyphenylene Sulfide (PPS)
- Flammability: UL94V-0
- Color: Black
- Lid Material: Aluminum
- Latch Material: Stainless Steel
- Thruster & Contact Material: Beryllium Copper (C172) Plating; Underplate: 50µ" (1.27µm) Nickel; Wiping Area: 30µ" (0.76µm) Gold; Solder Tails: 30µ" (0.76µm) Gold
- Marking: Raised Letters

Electrical Specifications:

- Current Rating: 1 Amp
- Insulation Resistance: >1x10¹²Ω
- Withstanding Voltage: 1000 Vrms at Sea Level

Environmental Specifications:

- Operating Temperature Rating: -55° - 105°C

Lid Type	No./Cont.	Digi-Key Part No.	Pricing		3M Part No.
LCC Sockets					
Full	68	3M6809A-ND	11.37	99.09	268-5401-00-1102JH
No Lid	68	3M6809B-ND	11.37	99.09	268-5401-11-1102JH
U-Shaped	68	3M6809C-ND	10.80	94.07	268-5401-50-1102JH
LCC Socket Lid					
Full	—	3MLLSF-ND	.64	5.56	268-5401-00-0000
U-Shaped	—	3MLLSU-ND	.71	6.20	268-5401-50-0000
Finned	—	3MLLSH-ND	2.44	21.18	268-5401-52-0000

3M IC Test Clips

Features:

- Simplifies prototype and production testing, field service work, and Quality Control.
- One-piece body for each DIP size. TC-14 fits 14-pin DIP, etc.
- High reliability Gold contacts.
- Proven 770 Alloy contacts.
- Rugged, engineering-grade thermoplastic body molded around contact pins
- Knife Edge contacts concentrate high normal force in a small area that break through oxides and conformal coatings



923690-08-ND Shown

No. of Row Pins	Row (Inch)	Nail-Head Leads Digi-Key Part No.	Price Each	Headless Leads Digi-Key Part No.	Price Each
Alloy 770					
8	.3	923695-ND	10.27	923690-08-ND	10.99
14	.3	923698-ND	10.35	923690-14-ND	11.27
16	.3	923700-ND	10.45	923690-16-ND	11.39
16	5/6	923702-ND	17.37	—	—
18	.3	923703-ND	14.69	923690-18-ND	15.72
20	.3	923704-ND	15.37	923690-20-ND	16.45
24	5/6	923714-ND	20.00	923690-24-ND	21.40
24	.3	—	—	923689-24-ND	21.40
28	5/6	923718-ND	24.00	923690-28-ND	25.69
28	.3	923717-ND	22.85	923689-28-ND	25.69
36	5/6	923720-ND	26.64	923690-36-ND	28.51
40	5/6	923722-ND	27.96	923690-40-ND	29.91
64	.9	923726-ND	42.59	—	—
Gold Plated					
8	.3	923743-08-ND	13.34	923739-08-ND	13.34
14	.3	923743-14-ND	13.70	923739-14-ND	13.70
16	.3	923743-16-ND	14.05	923739-16-ND	14.05
18	.3	923743-18-ND	19.00	923739-18-ND	19.74
20	.3	923743-20-ND	24.35	923739-20-ND	22.67
24	5/6	923743-24-ND	26.09	923739-24-ND	26.84
24	.3	923742-24-ND	26.09	923738-24-ND	26.09
28	5/6	923743-28-ND	31.36	923739-28-ND	34.66
28	.3	923742-28-ND	31.36	923738-28-ND	31.36
40	5/6	923743-40-ND	36.76	923739-40-ND	36.76
48	5/6	—	—	923739-48-ND	49.21
64	.9	—	—	923739-64-ND	56.31

◆ RoHS Compliant

No. of Pins	Description	Digi-Key Part No.	Price Each
Knife Edge Gold Plated — RoHS Compliant			
8	.300 Knife Edge Test Clip	927739-08-ND	21.09
16	.300 Knife Edge Test Clip	927739-16-ND	23.94
18	.300 Knife Edge Test Clip	927739-18-ND	32.41
20	.300 Knife Edge Test Clip	927739-20-ND	37.81
22	.300 Knife Edge Test Clip	927738-22-ND	41.31
24	.300 Knife Edge Test Clip	927738-24-ND	43.54
28	.300 Knife Edge Test Clip	927738-28-ND	52.79
22	.600 Knife Edge Test Clip	927739-22-ND	41.31
24	.600 Knife Edge Test Clip	927739-24-ND	45.58
28	.600 Knife Edge Test Clip	927739-28-ND	52.79
40	.600 Knife Edge Test Clip	927739-40-ND	62.33

3M Surface Mount Test Clips

by 3M Electronic Specialty Products

Features:

- Allow safe, convenient, fast and easy testing of normally hard-to-access. Small Outline Integrated Circuits (SOICs)
- Eight sizes available for .30" (7.62mm) and .15" (3.81mm) package sizes
- Helical compression springs and insulating contact combs ensure contact integrity during testing
- Permits devices stacked as close as .0505" (1.28mm) end-to-end to be tested simultaneously
- Standard .025" (.64mm) square contacts on .10" (2.54mm) centers at the probe end of the clip easily accept test probes or single row female socket connectors
- Steel hinge pin and glass filled polyester body provide long service life
- Available with alloy 764 unplated and gold plated leads
- Allows safe, convenient testing of Plastic Leaded Chip Carrier (PLCC) style ICs
- All four sides of test clip open simultaneously for fast and easy attachment to PLCC being tested
- Stays securely clamped to PLCC until removed
- Helical compression springs and insulating contact combs ensure contact integrity during testing
- Permits testing of ICs with as little as .200" (5.08mm) row to row spacing between devices
- Staggered contact rows on .100" (2.54mm) centers
- Industry standard .025" (.64mm) square contact pins on .100" (2.54mm) centers
- Available with alloy 764 leads and gold plated leads.



No. of Pins	Description	Narrow Digi-Key Part No.		Wide Digi-Key Part No.	
		.150" SOIC	Price Each	.300" SOIC	Price Each
8	Alloy 764	923650-08-ND	12.25	—	—
14	Alloy 764	923650-14-ND	12.40	—	—
16	Alloy 764	923650-16-ND	12.75	923660-16-ND	12.90
18	Alloy 764	—	—	923660-18-ND	13.65
20	Alloy 764	—	—	923660-20-ND	14.99
24	Alloy 764	—	—	923660-24-ND	15.47
28	Alloy 764	—	—	923660-28-ND	16.57
8	Gold Plated	923655-08-ND	12.75	—	—
14	Gold Plated	923655-14-ND	14.12	—	—
16	Gold Plated	923655-16-ND	13.99	923665-16-ND	14.82
18	Gold Plated	—	—	923665-18-ND	14.94
20	Gold Plated	—	—	923665-20-ND	15.45
24	Gold Plated	—	—	923665-24-ND	17.05
28	Gold Plated	—	—	923665-28-ND	18.30

No. of Pins	Description	PLCC Digi-Key Part No.	Price Each
PLCC			
20	Alloy 764	923670-20-ND	33.97
28	Alloy 764	923670-28-ND	36.02
44	Alloy 764	923670-44-ND	45.71
68	Alloy 764	923670-68-ND	61.81
20	Gold Plated	923675-20-ND	37.46
28	Gold Plated	923675-28-ND	44.33
44	Gold Plated	923675-44-ND	49.01
68	Gold Plated	923675-68-ND	57.74
84	Gold Plated	923675-84-I-ND	62.20

3M PLCC Chip Carrier Sockets



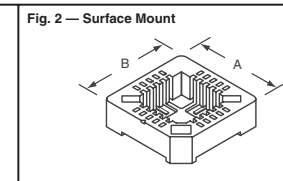
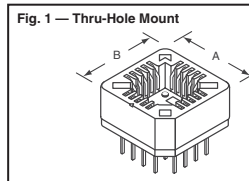
Features:

- Accepts chip carriers conforming to JEDEC outline MO-047 for square and MO-052 for rectangular
- High temperature insulator compatible with IR reflow and wave soldering
- Compatible with automated loading equipment
- Open top design allows unrestricted air flow
- Molded slots for ease of device extraction.

Physical Specifications:

- Insulation: Material: Glass Filled Polyphenylene Sulfide (PPS)
- Flammability: UL 94V-0
- Color: Black
- Contact Material: Phosphor Bronze
- Plating: Underplating: 50µ" (1.27µm) Nickel - Overall: Wiping Area: 160µ" () Matte Tin

No. of Pins	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each			3M Part No.
Fig. 1 — Low Profile, 4 Row, PLCC Thru-Hole Mount							
20	0.611 (15.50)	0.611 (15.50)	3M2011B1-ND	.81	.71	.57	8420-21A1-RK-TP
28	0.711 (18.05)	0.711 (18.05)	3M2811B1-ND	.93	.81	.66	8428-21A1-RK-TP
32	0.711 (18.05)	0.812 (20.60)	3M3211B1-ND	.99	.86	.70	8432-21A1-RK-TP
44	0.926 (23.50)	0.926 (23.50)	3M4411B1-ND	1.17	1.02	.82	8444-21A1-RK-TP
52	1.020 (25.88)	1.020 (25.88)	3M5211B1-ND	1.29	1.12	.91	8452-21A1-RK-TP
68	1.223 (31.05)	1.223 (31.05)	3M6811B1-ND	1.59	1.38	1.12	8468-21A1-RK-TP
84	1.420 (36.05)	1.420 (36.05)	3M8411B1-ND	1.86	1.62	1.31	8484-21A1-RK-TP
Fig. 2 — 4 Row, PLCC Surface Mount							
20	0.617 (15.65)	0.617 (15.65)	3M2021B1-ND	.84	.73	.59	8420-21B1-RK-TP
28	0.716 (18.18)	0.716 (18.18)	3M2821B1-ND	.87	.76	.61	8428-21B1-RK-TP
32	0.716 (18.18)	0.818 (20.75)	3M3221B1-ND	.96	.84	.68	8432-21B1-RK-TP
44	0.917 (23.28)	0.917 (23.28)	3M4421B1-ND	1.14	.99	.80	8444-21B1-RK-TP
52	1.018 (25.84)	1.018 (25.84)	3M5221B1-ND	1.26	1.10	.89	8452-21B1-RK-TP
68	1.219 (30.95)	1.219 (30.95)	3M6821B1-ND	1.53	1.33	1.08	8468-21B1-RK-TP
84	1.418 (36.00)	1.418 (36.00)	3M8421B1-ND	1.65	1.43	1.16	8484-21B1-RK-TP



No. of Pins	Dimensions - Inch (mm)		Digi-Key Part No.	Price Each			3M Part No.		
Fig. 2 — 4 Row, PLCC Surface Mount with Location Post									
20	0.617 (15.65)	0.617 (15.65)	3M2021A1-ND	.84	.73	.59	8420-21A1-RK-TP		
28	0.716 (18.18)	0.716 (18.18)	3M2821A1-ND	.87	.76	.61	8428-21A1-RK-TP		
32	0.716 (18.18)	0.818 (20.75)	3M3221A1-ND	.96	.84	.68	8432-21A1-RK-TP		
44	0.917 (23.28)	0.917 (23.28)	3M4421A1-ND	1.14	.99	.80	8444-21A1-RK-TP		
52	1.018 (25.84)	1.018 (25.84)	3M5221A1-ND	1.26	1.10	.89	8452-21A1-RK-TP		
68	1.219 (30.95)	1.219 (30.95)	3M6821A1-ND	1.53	1.33	1.08	8468-21A1-RK-TP		
84	1.418 (36.00)	1.418 (36.00)	3M8421A1-ND	1.65	1.43	1.16	8484-21A1-RK-TP		
Fig. 2 — 4 Row, PLCC Surface Mount									
20	0.617 (15.65)	0.617 (15.65)	3M2021B1CT-ND	1.08	.94	.76	500	324.00	8420-21B1-RK-TR
28	0.716 (18.18)	0.716 (18.18)	3M2821B1CT-ND	1.08	.94	.76	450	291.60	8428-21B1-RK-TR
32	0.716 (18.18)	0.818 (20.75)	3M3221B1CT-ND	1.14	.99	.80	450	307.80	8432-21B1-RK-TR
44	0.917 (23.28)	0.917 (23.28)	3M4421B1CT-ND	1.38	1.20	.97	360	298.08	8444-21B1-RK-TR
52	1.018 (25.84)	1.018 (25.84)	3M5221B1CT-ND	1.56	1.36	1.10	350	327.60	8452-21B1-RK-TR
68	1.219 (30.95)	1.219 (30.95)	3M6821B1CT-ND	1.86	1.62	1.31	280	312.48	8468-21B1-RK-TR

* For Tape and Reel part number, change CT-ND to TR-ND.

More Product Available Online: www.digkey.com