

# 3M™ Chip Carrier Sockets

Surfacemount

8400 Series



- 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
- Available with optional PCB locating posts
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS Compliance" section of [www.3Mconnector.com](http://www.3Mconnector.com) for compliance information (RIA E1 and C1 apply)

Date Modified: September 14, 2011

TS-2147-B  
Sheet 1 of 2

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## Physical

### Insulation

Material: Glass Filled Polyphenylene Sulfide (PPS)

Flammability: UL 94V-0

Color: Black

### Contact

Material: Copper Alloy

### Plating

Underplating: 50 μ" [ 1.27 μm ] Nickel - Overall

Wiping Area: 160 μ", [ 4.06 μm ] Matte Tin

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## Electrical

**Contact Resistance:** 15 mΩ

**Insulation Resistance:** >10<sup>3</sup> MΩ minimum

**Capacitance:** <1 pF at 1 MHz

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## Environmental

**Temperature Rating:** -40°C to +105°C

**Process Rating:** Maximum 260°C, single pass, (profile per J-STD-020C)

**Moisture Sensitivity Level:** 1 (per J-STD-020C)

### Notice:

Please be aware that the 3M PLCC products are tin plated on the contact wiping surface. This is necessary to ensure mated reliability since standard PLCC contacts are also tin plated. Since tin whiskers are an inherent characteristic of tin and mechanically stressing the tin is a known driver of whisker growth, it is possible the PLCC and PLCC socket may exhibit tin whisker growth after mating. 3M follows the iNEMI plating recommendations which include whisker mitigating tin plating chemistry to reduce the likelihood of tin whisker growth. Please consider whether a PLCC socket is suitable for your particular needs after considering your product applications life span and environment including mechanical stresses, humidity, and thermal cycling all of which have been shown to stimulate tin whisker growth.



**Electronic Solutions Division**  
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<http://www.3Mconnectors.com>

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**800-225-5373**

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Contact Quantity	A	B	C	D	E	F	G	H
20	15.65 [0.616]	15.65 [0.616]	5.08 [0.200]	5.08 [0.200]	10.03 [0.395]	10.03 [0.395]	12.70 [0.500]	6.35 [0.250]
28	18.18 [0.716]	18.18 [0.716]	7.62 [0.300]	7.62 [0.300]	12.57 [0.495]	12.57 [0.495]	15.24 [0.600]	7.62 [0.300]
32	18.18 [0.716]	20.75 [0.817]	7.62 [0.300]	10.16 [0.400]	12.57 [0.495]	15.11 [0.595]	17.78 [0.700]	7.62 [0.300]
44	23.28 [0.917]	23.28 [0.917]	12.70 [0.500]	12.70 [0.500]	17.65 [0.695]	17.65 [0.695]	20.32 [0.800]	10.16 [0.400]
52	25.84 [1.017]	25.84 [1.017]	15.24 [0.600]	15.24 [0.600]	20.19 [0.795]	20.19 [0.795]	22.86 [0.900]	11.43 [0.450]
68	30.95 [1.219]	30.95 [1.219]	20.32 [0.800]	20.32 [0.800]	25.27 [0.995]	25.27 [0.995]	27.94 [1.100]	13.97 [0.550]
84	36.00 [1.417]	36.00 [1.417]	25.40 [1.000]	25.40 [1.000]	30.35 [1.195]	30.35 [1.195]	33.02 [1.300]	16.51 [0.650]

**Note:**

1. For Tape and Reel Packaging dimensions, contact 3M customer service or your preferred 3M distributor.

mm (Inch)		
Tolerance Unless Noted		
	.0	.00
mm	±.3	±.20
[ ] Dimensions for Reference Only		

## Ordering Information

**84XX - 21X1 - RK - XX**

Contact Quantity  
(See Table)

Alignment Feature:  
A = With Location Post (tube packaging only)  
B = Without Location Post

Packaging:  
TP = Tube Pack  
TR = Tape and Reel (see note)

TS-2147-B  
Sheet 2 of 2

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