

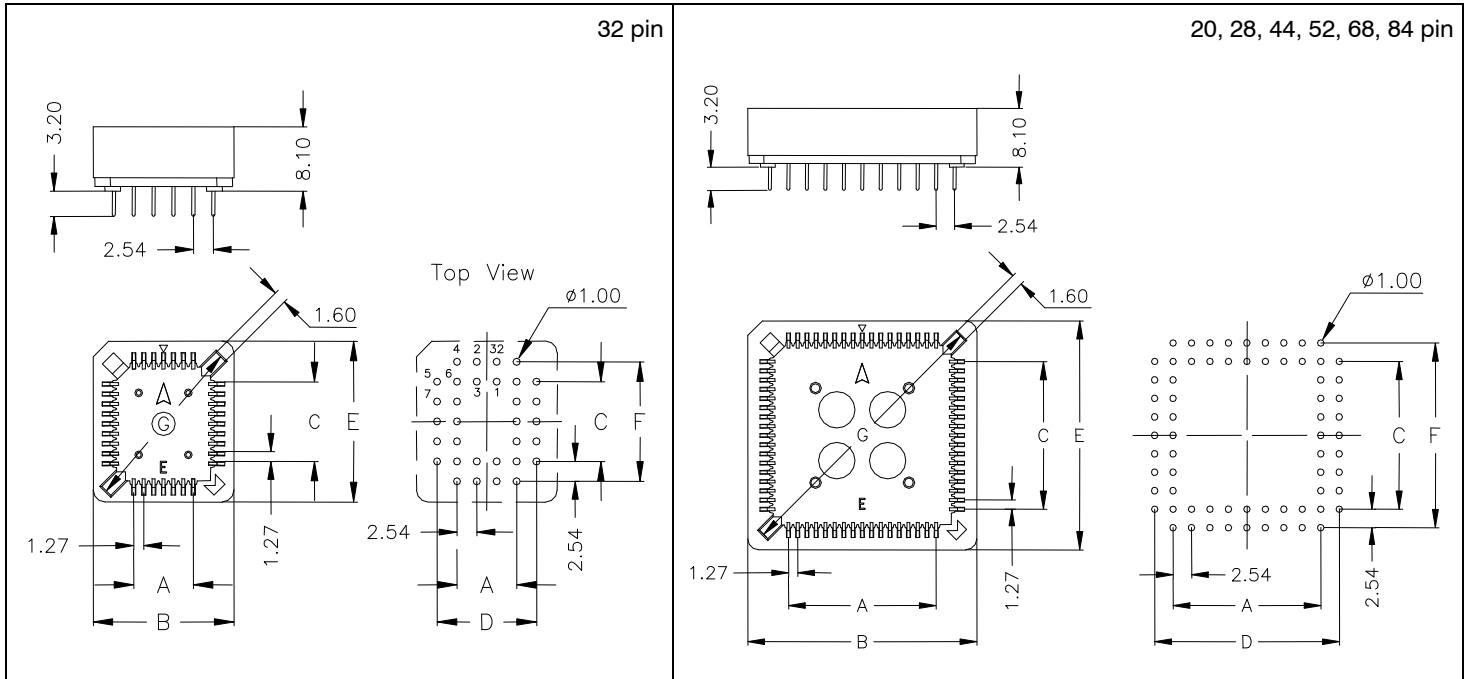
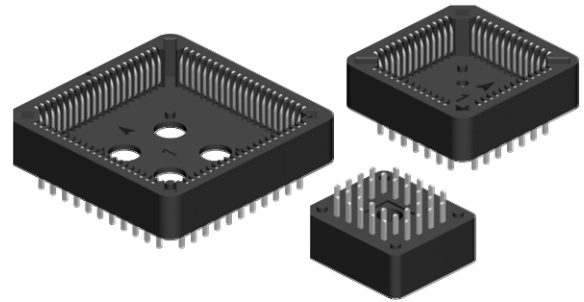
„Commercial“ PLCC Sockets

The „commercial“ PLE sockets have very solid solder legs for safe assembly to PCB.

The sockets are designed to accept PLCC Chips according to JEDEC standards.

The sockets are correctly oriented in the tubes for automatic pick and place.

Chips can be easily removed with the Universal extraction tool PUL - 200.



Specifications

Mechanical data

Insulator (RoHS compliant) High temp plastic UL 94 V-0
 Contact (RoHS compliant) Copper Alloy
 Plating Sn (leadfree) over Ni
 Insertion force 0.60N max.
 Extraction force 0.15N min.
 Mating cycles 50 min.

Electrical data

Withstanding voltage 600 V RMS for 1 Minute
 Contact resistance 20 mΩ max.
 Insulation resistance 1000 MΩ min.
 Current rating 1 A max., 250V AC

Operating temperature

Processing temperature

-40°C to +105°C
 260°C ±5°C for 5 Sec.

PIN	Ordering Code	Dimensions (mm)						
	"Commercial" PLCC through hole type	"A"	"B"	"C"	"D"	"E"	"F"	"G"
20	PLE - 020 - N115 - 99	5,08	15,50	5,08	10,16	15,50	10,16	17,06
28	PLE - 028 - N115 - 99	7,62	18,04	7,62	12,70	18,04	12,70	20,70
32	PLE - 032 - N115 - 99 (rectangular)	7,62	18,04	10,16	12,70	20,60	15,24	22,56
44	PLE - 044 - N115 - 99	12,70	23,48	12,70	17,78	23,48	17,78	28,40
52	PLE - 052 - N115 - 99	15,24	25,88	15,24	20,32	25,88	20,32	31,76
68	PLE - 068 - N115 - 99	20,32	31,04	20,32	25,40	31,04	25,40	39,16
84	PLE - 084 - N115 - 99	25,40	36,04	25,40	30,48	36,04	30,48	46,22
PUL -200		Universal extraction tool for all socket sizes (see also page 44)						

„Hi-rel“ Soldertail PLCC Sockets

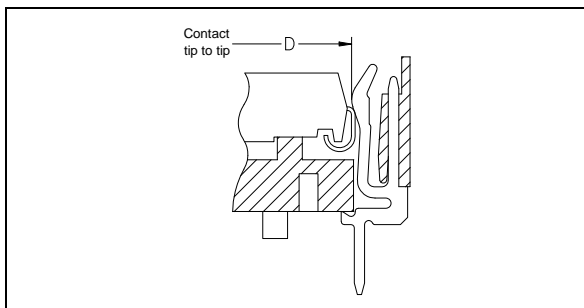
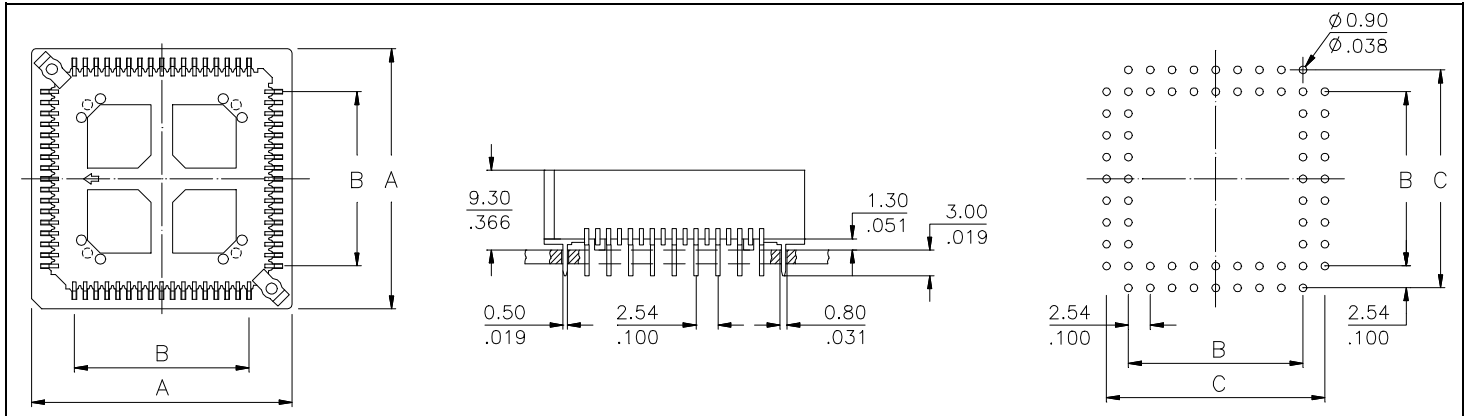
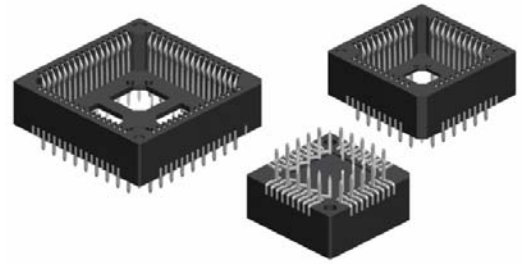
E-tec „hi-rel“ soldertail PLCC sockets correspond to JEDEC Norms. Precision stamped contact design provides special „push-down effect“ onto the leads of the chip.

Optional retention clips for very high shock and vibration applications.

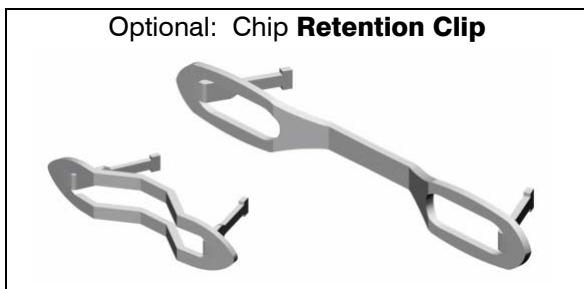
Inside polarisation corner prevents wrong insertion of the chips.

Stand-off's under the base prevent solder shorts.

Chips can be easily removed with the Universal extraction tool PUL - 200.



JEDEC Specification for Plastic Leaded Chip Carrier					
		Chip type "A" Chip type "B"			
Jedec Nbr	Nbr of Pins	Dimensions mm/inch			
		"A" min.	"A" max.	„B“ min.	„B“ max.
MO-047 AB	28	12,32 / .485	12,57 / .495	1,37 / .054	2,36 / .093
MO-052 AE	32 rectang.	14,86 x 12,32 .585 x .485	15,11 x 12,57 .595 x .495	1,37 / .054	2,36 / .093
MO-047 AB	44	17,40 / .685	17,65 / .695	1,37 / .054	2,36 / .093
MO-047 AB	52	19,94 / .785	20,19 / .795	1,37 / .054	2,36 / .093
MO-047 AB	68	25,02 / .985	25,27 / .995	1,37 / .054	2,36 / .093
MO-047 AB	84	30,10 / 1.185	30,35 / 1.195	1,37 / .054	2,36 / .093



Specifications			
Mechanical data	Temperature	Electrical data	
Plating: Sn (leadfree) over Ni	Operating temp.: -55° to +125 °C	Operating voltage: 100 V RMS / 150V DC	
Mating cycles: min. 50	Material	Breakdown voltage: >600 V RMS	
Insertion force: max. 1,30N per contact	Insulator (RoHS compliant): high temp plastic UL 94 V-0	Contact resistance: <20 mΩ	
Extraction force: min. 0,90N per contact	Contact (RoHS compliant): Phosphor Bronze	Insulation resistance: >5000 MΩ	
	Retention Clip: Spring steel	Current rating: 1 A max., 100V	
		Capacitance: <2 pF	

PIN	Ordering Code	Dimensions mm/inch			
		"A"	"B"	"C"	"D"
28	PLP - 028 - N110 - 99	17,60/.693	7,62/.300	12,70/.500	11,50/.453
32	PLP - 032 - N110 - 99 (rectangular)	17,60 x 20,14 .693 x .793	10,16 x 7,62 .400 x .300	12,70 x 15,24 .500 x .600	11,50 x 14,04 .453 x .553
44	PLP - 044 - N110 - 99	22,68/.893	12,70/.500	17,78/.700	16,58/.653
52	PLP - 052 - N110 - 99	25,22/.993	15,24/.600	20,32/.800	19,12/.753
68	PLP - 068 - N110 - 99	30,30/1.193	20,32/.800	25,40/1.000	24,20/.953
84	PLP - 084 - N110 - 99	35,38/1.393	25,40/1.000	30,48/1.200	29,28/1.153

Order Code for optional Retention Clip : HCP - xxx (replace "xxx" with nbr of pins. Example. -028 if for 28-pin Socket)

PUL - 200

Universal extraction tool for all socket sizes (see also page 44)

„Hi-rel“ SMT PLCC Sockets

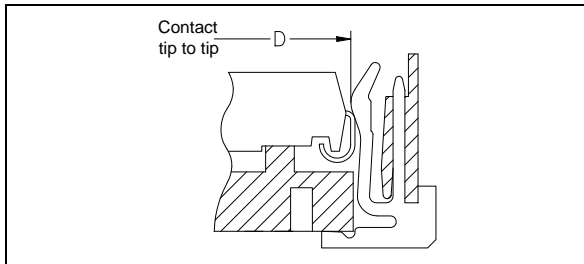
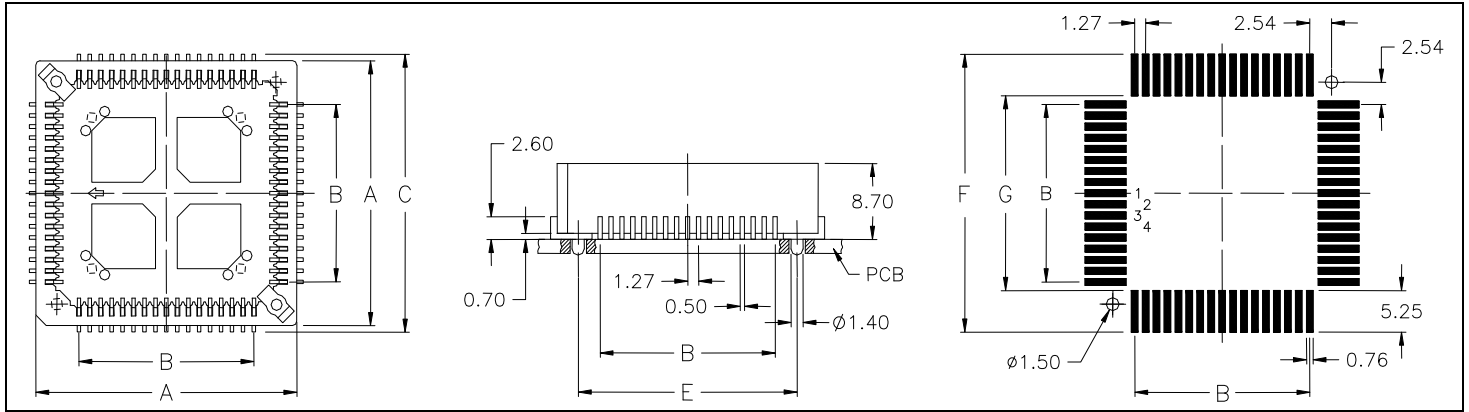
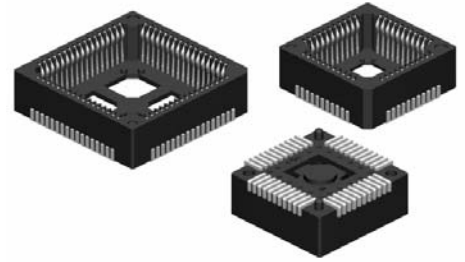
E-tec „hi-rel“ SMT PLCC sockets correspond to JEDEC Norms. Precision stamped contact design provides special „push-down effect“ onto the leads of the chip.

For very high shock and vibration applications a chip retention clip can be obtained on request.

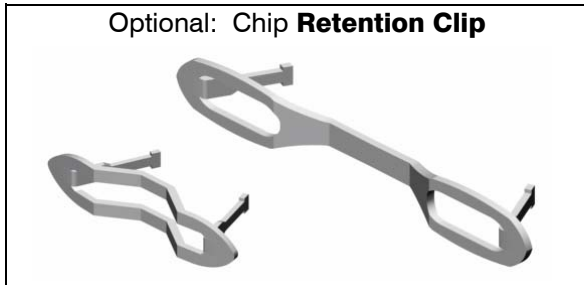
Inside polarisation corner prevents wrong insertion of the chips.

Stand-off's under the base prevent solder shorts.

Chips can be easily removed with the Universal extraction tool PUL-200.



JEDEC Specification for Plastic Leaded Chip Carrier					
Jedec Nbr	Nbr of Pin	Dimensions mm/inch			
		"A" min.	"A" max.	„B“ min.	„B“ max.
MO-047 AB	28	12,32 / .485	12,57 / .495	1,37 / .054	2,36 / .093
MO-052 AE	32 rectang.	14,86 x 12,32 .585 x .485	15,11 x 12,57 .595 x .495	1,37 / .054	2,36 / .093
MO-047 AB	44	17,40 / .685	17,65 / .695	1,37 / .054	2,36 / .093
MO-047 AB	52	19,94 / .785	20,19 / .795	1,37 / .054	2,36 / .093
MO-047 AB	68	25,02 / .985	25,27 / .995	1,37 / .054	2,36 / .093
MO-047 AB	84	30,10 / 1.185	30,35 / 1.195	1,37 / .054	2,36 / .093



Mechanical data		Temperature		Electrical data	
Plating	Sn (leadfree) over Ni; Au on request	Operating temp.	- 55°C to +125°C	Operating voltage	100 V RMS / 150V DC
Mating cycles	min. 50	Soldering temp.	+250°C +0/-5°C for 20~40 sec.	Breakdown voltage	>600 V RMS
Insertion force	max. 1,30N per contact	Material	Insulator (RoHS compliant) high temp plastic UL 94 V-0	Contact resistance	<20 mΩ
Extraction force	min. 0,90N per contact	Contact (RoHS compliant) Phosphor Bronze	Retention Clip Spring steel	Insulation resistance	>5000 MΩ
				Current rating	1 A max., 100V
				Capacitance	<2 pF

PIN	Ordering Code PLCC SMT Type	Dimensions mm/inch						
		"A" +0,10 -0,20	"B"	"C" +0,10 -0,05	"D"	"E" +0,10 -0,15	"F" +0,05 -0,00	"G" +0,00 -0,05
28	PLP - 028 - H100 - 99 (/x)	17,60/.693	7,62/.300	19,10/.752	11,50/.453	12,70/.500	19,60/.772	9,10/.358
32	PLP - 032 - H100 - 99 (/x) (rectangular)	17,60 x 20,14 .693 x .793	7,62 x 10,16 .300 x .400	19,10 x 21,64 .752 x .852	11,50 x 14,04 .453 x .553	12,70 x 15,24 .500 x .600	19,60 x 22,14 .772 x .872	9,10 x 11,14 .358 x .438
44	PLP - 044 - H100 - 99 (/x)	22,68/.893	12,70/.500	24,18/.952	16,58/.653	17,78/.700	24,68/.972	14,18/.558
52	PLP - 052 - H100 - 99 (/x)	25,22/.993	15,24/.600	26,72/1.052	19,12/.753	20,32/.800	27,22/1.072	16,72/.658
68	PLP - 068 - H100 - 99 (/x)	30,30/1.193	20,32/.800	31,80/1.252	24,20/.953	25,40/1.000	32,30/1.272	21,80/.858
84	PLP - 084 - H100 - 99 (/x)	35,38/1.393	25,40/1.000	36,88/1.452	29,28/1.153	30,48/1.200	37,38/1.472	26,88/1.058

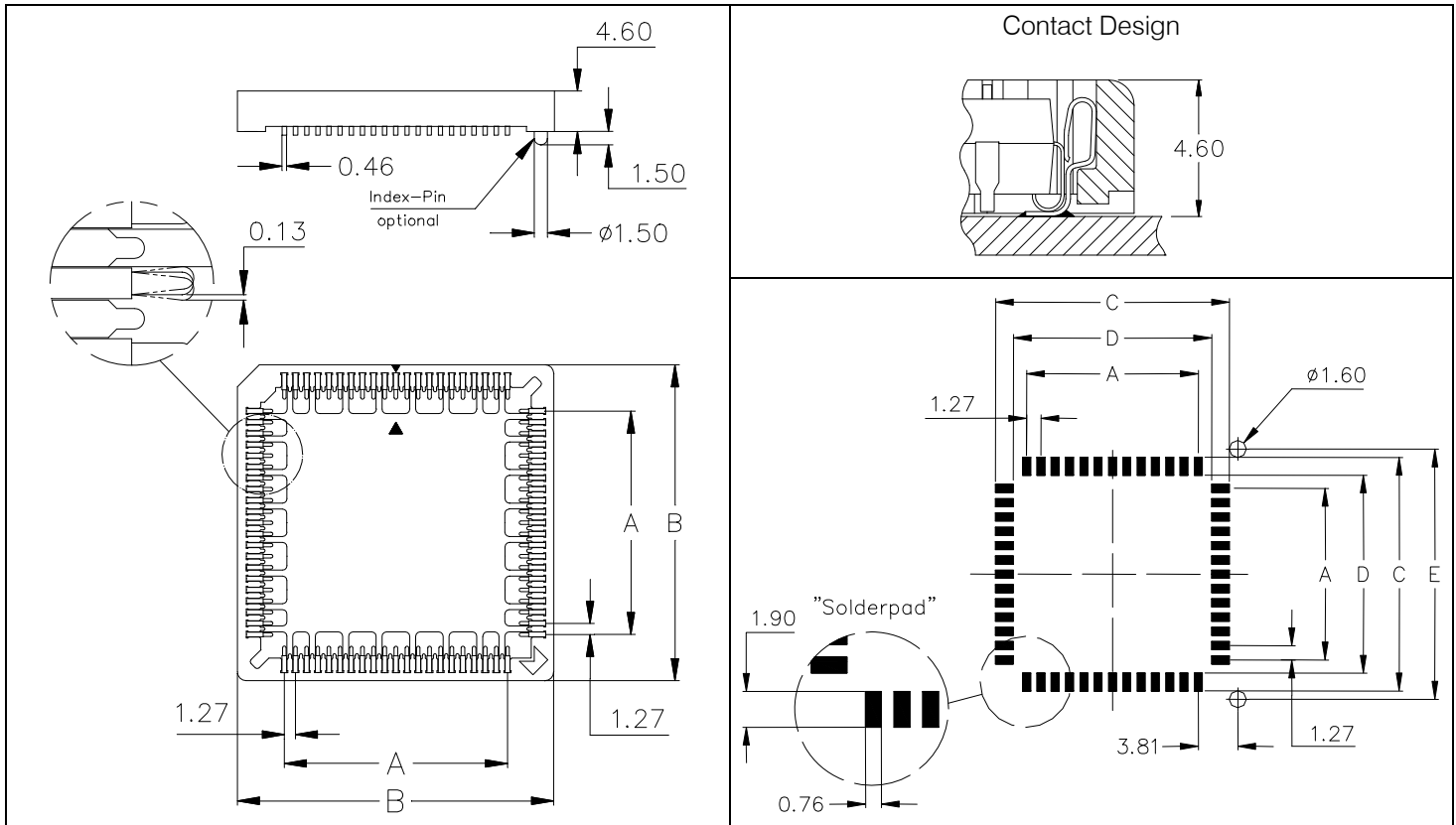
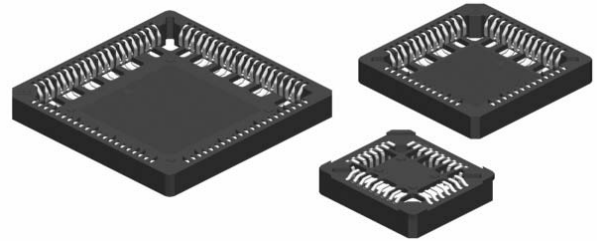
for sockets with index pins please add: /1 = 1 pin in right angle corner /2 = 1 pin in slanted corner /3 = 2 pins diagonal

Order Code for optional Retention Clip : HCP - xxx (replace "xxx" with nbr of pins. Example. -028 if for 28-pin Socket)

PUL - 200 Universal extraction tool for all socket sizes (see also page 44)

Standard SMT PLCC Sockets

Only 4.60mm height above board.
 Identical PCB layout for socket and chip.
 Solder terminals visible for post solder checks.
 Available with index pins under the insulator for correct orientation of the sockets.
 Diagonal slots for easy extraction of the chip with the Universal extraction tool PUL-200.
 Sockets correspond to JEDEC Norms.
 Also available in reel packaging.



Specifications

Mechanical data

Contact (RoHS compliant) Phosphor bronze
 Plating Sn (leadfree) over Ni
 Insulator (RoHS compliant) High temp plastic black UL 94 V-0
Temperature
 Operating temp. - 40°C to +105°C
 Processing temp. +250°C +0/-5°C for 20~40sec.

Electrical data

Measuring voltage 100 V RMS / 150V DC
 Breakdown voltage >600 V RMS
 Contact resistance <20 mΩ
 Insulation resistance >5000 MΩ
 Current rating 1 A max., 100V
 Capacitance <2 pF

PIN	Ordering Code		Dimensions mm				
	PLCC SMT without index pins	PLCC SMT with index pins	"A"	"B"	"C"	"D"	"E"
20	PLS - 020 - H105 - 99	PLS - 020 - H105 - 99/4	5,08	15,58	10,50	6,70	12,70
28	PLS - 028 - H105 - 99	PLS - 028 - H105 - 99/4	7,62	18,12	12,61	8,81	15,24
32	PLS - 032 - H105 - 99 (rectangular)	PLS - 032 - H105 - 99/4 (rectangular)	7,62 x 10,16	20,66 x 18,12	13,04 x 15,58	9,24 x 11,78	17,78
44	PLS - 044 - H105 - 99	PLS - 044 - H105 - 99/4	12,70	23,20	18,12	14,32	20,32
52	PLS - 052 - H105 - 99	PLS - 052 - H105 - 99/4	15,24	25,74	20,86	17,06	22,86
68	PLS - 068 - H105 - 99	PLS - 068 - H105 - 99/4	20,32	30,82	25,74	21,94	27,94
84	PLS - 084 - H105 - 99	PLS - 084 - H105 - 99/4	25,40	35,90	30,39	26,59	33,02
For reel packing pls. order with - 99/R							
PUL -200			Universal extraction tool for all sizes (see also page 44)				