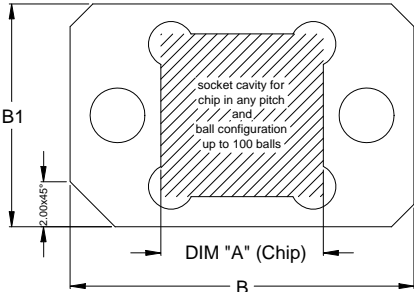

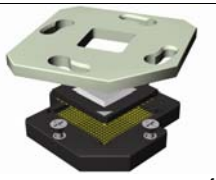


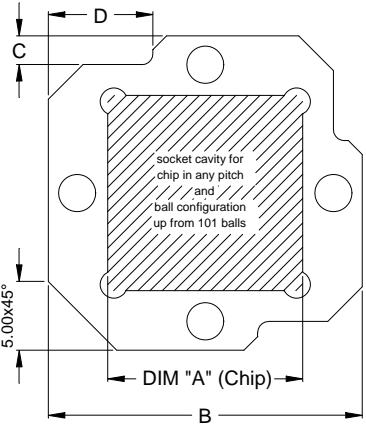
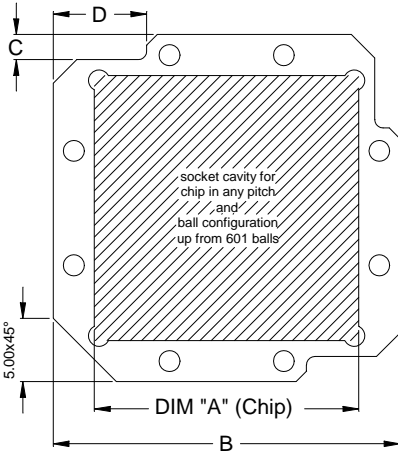
Ball / Land Grid Array Sockets

Top View for "TwistLock sockets" (through-hole & SMT style only)

Socket outline for small sized chips up to 100 balls or lands

<p>Note: TwistLock sockets up to 100 pins are produced with 2 screws.</p> 	DIM "A" Chip (sq.)	DIM "B" Socket	DIM "B1" Socket	 <p>up to 100 pins</p>
	6.00mm / .236"	14.77mm / .581"	9.87mm / .389"	
	7.00mm / .276"	16.04mm / .631"	11.14mm / .439"	
	8.00mm / .315"	17.31mm / .681"	12.41mm / .489"	
	9.00mm / .354"	18.58mm / .731"	13.68mm / .539"	
	10.00mm / .394"	19.85mm / .781"	14.95mm / .589"	
	11.00mm / .433"	19.85mm / .781"	14.95mm / .589"	
	12.00mm / .472"	21.12mm / .831"	16.22mm / .639"	
	13.00mm / .512"	22.39mm / .881"	17.49mm / .689"	
	14.00mm / .551"	23.66mm / .931"	18.76mm / .739"	
	15.00mm / .591"	24.93mm / .981"	20.03mm / .789"	
	16.00mm / .630"	26.20mm / 1.031"	21.30mm / .839"	
	17.00mm / .669"	26.20mm / 1.031"	21.30mm / .839"	
	18.00mm / .709"	27.47mm / 1.081"	22.57mm / .889"	
	19.00mm / .748"	27.47mm / 1.081"	22.57mm / .889"	
				 <p>as of 101 pins</p>

Socket outline for standard chips as of 101 balls or lands

<p>Note: TwistLock sockets from 101 to 600 pins are produced with 4 screws.</p> 	<p>Note: TwistLock sockets as of 601 pins are produced with 8 screws.</p> 	DIM "A" Chip (sq.)	DIM "B" Socket (sq.)	DIM "C" Socket	DIM "D" Socket
		13.00mm / .512"	21.59mm / .850"	2.51mm / .099"	7.62mm / .312"
		14.00mm / .551"	22.86mm / .900"	2.09mm / .082"	7.62mm / .312"
		15.00mm / .591"	24.13mm / .950"	2.81mm / .111"	8.89mm / .350"
		16.00mm / .630"	24.13mm / .950"	2.81mm / .111"	8.89mm / .350"
		17.00mm / .669"	25.40mm / 1.000"	2.84mm / .112"	8.89mm / .350"
		18.00mm / .709"	26.67mm / 1.050"	2.99mm / .118"	8.89mm / .350"
		19.00mm / .748"	27.94mm / 1.100"	2.71mm / .107"	8.91mm / .351"
		20.00mm / .787"	29.21mm / 1.150"	2.70mm / .106"	8.89mm / .350"
		21.00mm / .827"	29.21mm / 1.150"	2.70mm / .106"	8.89mm / .350"
		22.00mm / .866"	30.48mm / 1.200"	2.60mm / .102"	8.89mm / .350"
		23.00mm / .905"	31.75mm / 1.250"	2.88mm / .113"	9.53mm / .375"
		24.00mm / .945"	33.02mm / 1.300"	2.39mm / .094"	8.89mm / .350"
		25.00mm / .984"	33.02mm / 1.300"	2.39mm / .094"	8.89mm / .350"
		26.00mm / 1.024"	34.29mm / 1.350"	2.74mm / .108"	8.89mm / .350"
		27.00mm / 1.063"	35.56mm / 1.400"	2.53mm / .099"	9.53mm / .375"
		28.00mm / 1.102"	36.83mm / 1.450"	2.50mm / .098"	9.53mm / .375"
		29.00mm / 1.142"	38.10mm / 1.500"	2.81mm / .111"	9.53mm / .375"
		30.00mm / 1.181"	38.10mm / 1.500"	2.81mm / .111"	9.53mm / .375"
		31.00mm / 1.220"	39.37mm / 1.550"	2.54mm / .100"	9.53mm / .375"
		32.00mm / 1.260"	40.64mm / 1.600"	2.88mm / .113"	9.53mm / .375"
		32.50mm / 1.279"	40.64mm / 1.600"	2.88mm / .113"	9.53mm / .375"
		33.00mm / 1.299"	41.91mm / 1.650"	2.80mm / .110"	9.53mm / .375"
		34.00mm / 1.339"	43.18mm / 1.700"	2.05mm / .081"	9.53mm / .375"
		34.50mm / 1.358"	43.18mm / 1.700"	2.05mm / .081"	9.53mm / .375"
		35.00mm / 1.378"	43.18mm / 1.700"	2.05mm / .081"	9.53mm / .375"
		36.00mm / 1.358"	44.45mm / 1.750"	3.00mm / .118"	9.53mm / .375"
		37.00mm / 1.457"	45.72mm / 1.800"	2.10mm / .083"	8.26mm / .325"
		37.50mm / 1.476"	45.72mm / 1.800"	2.10mm / .083"	8.26mm / .325"
		38.00mm / 1.496"	46.99mm / 1.850"	3.15mm / .124"	9.53mm / .375"
		39.00mm / 1.535"	48.26mm / 1.900"	2.24mm / .088"	9.53mm / .375"
		40.00mm / 1.575"	48.26mm / 1.900"	2.24mm / .088"	9.53mm / .375"
		41.00mm / 1.641"	49.53mm / 1.950"	3.00mm / .118"	9.53mm / .375"
42.00mm / 1.653"	50.80mm / 2.000"	2.32mm / .091"	9.53mm / .375"		
42.50mm / 1.673"	50.80mm / 2.000"	2.32mm / .091"	9.53mm / .375"		
43.00mm / 1.693"	52.07mm / 2.050"	2.78mm / .109"	9.53mm / .375"		
44.00mm / 1.732"	52.07mm / 2.050"	2.78mm / .109"	9.53mm / .375"		
45.00mm / 1.772"	53.34mm / 2.100"	2.41mm / .095"	9.53mm / .375"		
46.00mm / 1.811"	54.61mm / 2.150"	3.16mm / .124"	9.53mm / .375"		
47.00mm / 1.850"	55.88mm / 2.200"	3.30mm / .130"	9.53mm / .375"		
48.00mm / 1.890"	57.15mm / 2.250"	2.54mm / .100"	9.53mm / .375"		
49.00mm / 1.929"	57.15mm / 2.250"	2.54mm / .100"	9.53mm / .375"		
50.00mm / 1.868"	58.42mm / 2.300"	2.54mm / .100"	9.53mm / .375"		

For Solderless, FastLock, LeverLock, QuickLock, ClamShell & other locking systems or larger size outline dimensions, please contact your E-tec sales office for dimensional drawings.