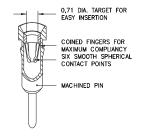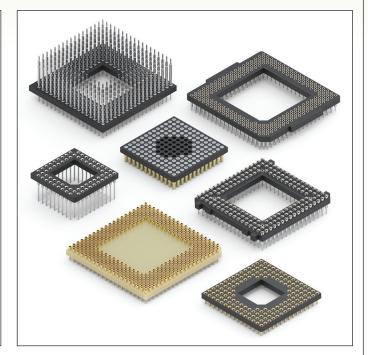# PIN GRID ARRAY SOCKETS

## TECHNICAL SPECIFICATIONS

Pin grid array sockets are designed to accept high pin count IC's. They use low force 6-finger contacts to ease insertion / extraction of the device. Standard low force (MM #32) contact is used for pin counts up to 150, ultra-low force (MM #35) contact is recommended for 150 pins or more but less than 250 pins. The "ultra lite" (MM #43) is recommended for 250 pins or more.

PGA sockets all have precision-machined pins. This offers the lowest possible profile. The closed bottom design also eliminates flux and solder contamination, and the pins are in-line with contact entry.

Insulator bodies are molded from high temperature PCT polyester suitable for all forms of soldering including wave, infra-red reflow and vapor phase.

### CONTACT DETAIL



0,71 DIA. TARGET FOR EASY INSERTION

COINED FINGERS FOR MAXIMUM COMPLIANCY SIX SMOOTH SPHERICAL CONTACT POINTS

MACHINED PIN



## TECHNICAL SPECIFICATIONS
### Materials

**Insulator body:**
- High temperature glass-filled thermoplastic polyester (PCT)
- Heat deflection temperature (HDT @ 264 PSI) = 255°C (490°F)
- Self-extinguishing, rated UL94V-0

**Receptacle (Sleeve):**
- Screw machined brass (ASTM-B16-00), plated 0,25μm gold, 5,08μm tin or 5,08μm tin-lead (SnPb 90/10) over 2,54μm nickel.

**Pin:**
- Screw machined brass (ASTM-B16-00), plated 0,25μm gold, 5,08μm tin or 5,08μm tin-lead (SnPb 90/10) over 2,54μm nickel.

**Contact (clip):**
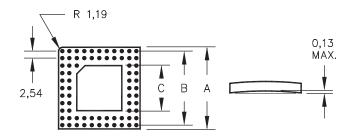- Stamped beryllium-copper (ASTM-B194-01), plated 0,25μm or 0,76μm gold over 1,27μm nickel.

### Mechanical Data
- Insertion characteristics:
- Measured with a polished steel gauge 0,46 diameter
- Low force MM#32 (01 suffix) typical insertion force 50 grams
  typical extraction force 30 grams
- Ultra-low force MM#35 (02 suffix) typical insertion force 25 grams
  typical extraction force 15 grams
- "Ultra lite" MM#43 (03 suffix) typical insertion force 12.5 grams
  typical extraction force 7.5 grams
- Mechanical life: 100 cycles min.

### Electrical & Environmental Data
- See general specifications on page 264.

## DIMENSIONS OF PGA SOCKET INSULATORS



R 1,19

2,54

C B A

0,13 MAX.

DIMENSIONS **A, B,** and **C** can be calculated as follows:

**N1** = GRID SIZE (# of pins per side, outer most row only for interstitial patterns)

**N2** = WINDOW SIZE

$A = N1 \times 2,54$

$B = (N1-1) \times 2,54$

$C = (N2 \times 2,54) - 0,41$