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.

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 10 μ'' gold, 200 μ'' tin or 200 μ'' tin-lead (SnPb 90/10) over 100 μ'' nickel.

Pin:

• Screw machined brass (ASTM-B16-00), plated 10 μ'' gold, 200 μ'' tin or 200 μ'' tin-lead (SnPb 90/10) over 100 μ'' nickel.

Contact (clip):

- Stamped beryllium-copper (ASTM-B194-01), plated 10 μ'' or 30 μ'' gold over 50 μ'' nickel.





Mechanical Data

- Insertion characteristics:
- Measured with a polished steel gauge .018" 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 **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

$$A = N1 X.100$$

$$\mathbf{B} = (N1-1) \times .100^{\circ}$$

$$C = (N2 X .100'') - .016''$$

