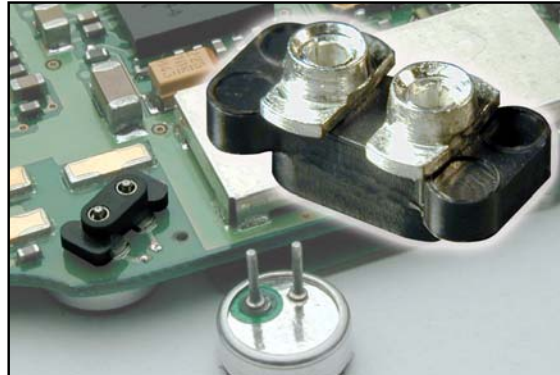


MAX solutions

Mill-Max Microphone Socket for Cellular Phones



- Microphones must be hand soldered or socketed because the Mylar diaphragm inside the microphone would melt if it were reflow soldered directly to the circuit board. A socket eliminates the expense of hand soldering.
- The Mill-Max socket is designed for bottom entry, eg., the microphone plugs through the circuit board into the socket on the opposite side. This feature achieves a low microphone profile suitable for “shirt pocket” sized phones.
- Sockets are supplied on 12mm wide tape (6,500 per 13” reel) to feed industry standard “pick and place” assembly machines.
- The assembly and soldering technique for this socket is called “intrusive reflow”. Intrusive reflow (also called “pin-in-paste”) is a technique of using conventional through-hole components in a reflow soldering process. The leads of the component are placed into plated-through-holes in the circuit board (solder paste has previously been screen printed on pads adjacent to the holes) and the board is reflowed in the same pass as other SMT components. The solder paste will fill the PTH and achieve a solder joint as reliable as wave soldering. The volume of paste required to fill each hole can be increased by “overprinting” paste on the solder mask adjacent to the hole.
- The primary benefit of the Mill-Max design is that the precision-machined receptacles have a large entry target, which permits automatic insertion of the microphone during final assembly of the telephone.

For more information, please visit mill-max.com/PR508.

(7/09 - 508)

Mill-Max Mfg. Corp. • 190 Pine Hollow Road, Oyster Bay, NY 11771-0300
516-922-6000 • Fax: 516-922-9253 • www.mill-max.com



| DATABASE NO. | FILE NAME | REV | DATE | DESCRIPTION |
|--------------|-----------|-----|------|-------------|
| | | | | |

INSULATOR #P302-18-000-03-0000000
(TOP VIEW)

MILL-MAX TYPE #11 CONTACT

PAD STACK

Ø.060±.003 PTH

.075

.063

.115

.047 DIA.

.055 DIA.

.026

.030

.024

.066

.044 DIA.

PINS #8874-0-15-01-11-02-40-0

ORDER AS: S388-99-102-11-740800 (Loose)

ORDER AS: S388-99-102-11-740799 (Tape&Reel)

NOTES:

- SHELL MATERIAL: BRASS ALLOY 360, 1/2 HARD.
- SHELL FINISH: 200 μ^m TIN/LEAD OVER NICKEL.
- CONTACT MATERIAL: BERYLLIUM COPPER ALLOY 172, HEAT TREATED.
- CONTACT FINISH: 100 μ^m TIN/LEAD OVER NICKEL.
- INSULATOR MATERIAL: HIGH TEMP. NYLON 46, RATED UL 94 V-O.
- SUPPLIED ON 12mm WIDE TAPE, 4mm PITCH. 6,500 PARTS PER 13" REEL.

MILL-MAX MFG. CORP.
P.O. BOX 300, 190 PINE HOLLOW ROAD, OYSTER BAY, NY 11771-0300
TEL: (516)922-6000, FAX: (516)922-9253, WEB: WWW.MILL-MAX.COM

| DIMENSIONS IN INCHES | DIMENSIONS IN INCHES | SCALE | DATE | DRAWN | CHECKED | ENG. APPROVAL | DATE |
|------------------------------|---------------------------|-------|---------|-------------------|---------|---------------|------|
| PIN | INSULATOR | — | 5/26/98 | D.M. | | | |
| TOLERANCES: LENGTHS ±.005 | TOLERANCES: LENGTHS ±.005 | | | | | | |
| DIAMETERS ±.002 | THICKNESS ±.003 | | | | | | |
| ANGLES ±2° | HOLE TO HOLE ±.001 | | | | | | |
| NON ACCUMULATIVE | | | | | | | |
| TITLE | | | | CUSTOMER APPROVAL | | | |
| 2 POSITION MICROPHONE SOCKET | | | | DATE | | | |
| PROPOSAL NUMBER | | | | REV | | | |
| PR#508 | | | | PR#508 | | | |