

Crane Offers Many Socket Options

CINCINNATI, OHIO

SALES BULLETIN SB-1900

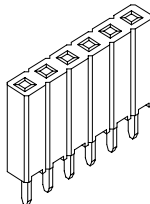
Wide Selection Of Sockets Offered

Crane manufactures a variety of Board Mount Sockets to meet the needs of designers worldwide. Some of the options Crane offers include:

- .100" / .079" / .050" center lines
- six plating options
- thru-hole and SMT terminations
- high and low profile versions
- top, bottom or side entry
- high and low insertion force contacts
- optional tail lengths
- mezzanine (PC/104) applications

ATP/ATL Board Mount Sockets Feature HI-REL Tuning Fork Contacts

Crane's **ATP/ATL** Series Board Mount Sockets on 0.100" centers feature a high reliability tuning fork contact that outperforms many other designs. This socket has been approved by DESC (Defense Electronics Supply Center) for use in military applications. If your application will expose components to high vibration or other stressful environmental challenges, Crane's **ATP** Series sockets may be your best bet.



ATP Series

AVAILABLE OPTIONS ...

- Single, dual and triple row versions
- Low Insertion Force Contacts (**ATL** Series)
- Four optional tail lengths
- Six plating options including 50u gold

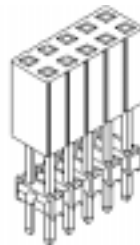
NEED A SAMPLE?

Call 1-800-676-7644 (US) or 1-800-420-7310 (Can),

Or E-mail us at sales@craneconnectors.com

We'll rush the parts right out to you!

MATP/MATL Sockets Really Stack Up!

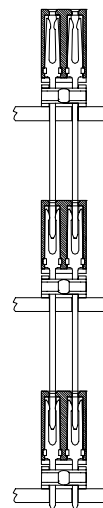


MATP Series

Crane's **MATP** and **MATL** (low insertion force) sockets provide a number of board stacking options. When used with Crane's popular **MPEG** Series headers, board stacking combos as tall as 2.000" are achievable. **MATP** and **MATL** Series sockets with square tails are self-

matting, allowing a series of sockets to be plugged into each other in mezzanine-style applications.

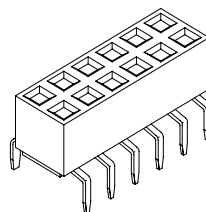
NOTE: Crane's **MATP/MATL** Series Sockets meet the requirements of the PC/104 (Embedded Module) standard. See Crane Sales Bulletin SB-600 for more detail.



MATP Series

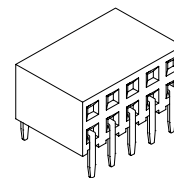
BBP and ABH Series Sockets On 0.100" Centers Offer Bottom Entry Option

Crane's **BBP** Series sockets give the designer the option to choose a top or bottom entry approach. Since tails of the contact extend out from the sides of the housing, entry from beneath the PCB is possible. The **BBP** Series sockets also provide the user with a low profile insulator. Socket height off the board for both the single row and dual row version is just 0.200" (5,08mm).



BBP Series

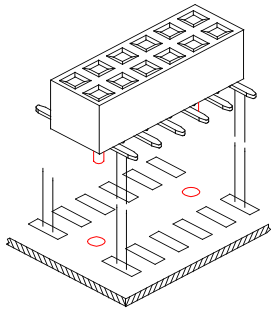
Crane's **ABH** Series socket is equally versatile, offering the benefits of a box-style contact in a right angle (side entry) version. The **ABH** Series socket is specifically designed for perpendicular board connections, and is preferred due to its **EARLY MATE** contact point.



ABH Series

Crane Sockets Available In 0.079" (2mm) and 0.050" Center Line Options

ATM Series Offers Low Profile



ATM Series / SMT

Crane's **ATM** Series Sockets on 0.079" (2mm) centers offer an insulator height of just 0.169" (4.3mm). Available in both thru-hole and surface mount (SMT) termination styles, these sockets are excellent for high density applications. Both the thru-hole and SMT versions are compatible with IR, vapor, and wave solder applications.

An optional alignment post (shown in the illustration to the left) is available on SMT parts to prevent unwanted movement during the reflow process.

DESIGN TIP: Crane's **ATM** Series sockets can also be used for bottom entry applications to save additional board space (box style contact allows entry from top or bottom).

Coming Soon!

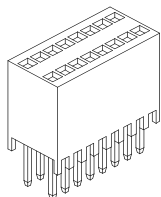
Crane's new AMT Series Sockets will be available by the Spring of 1999. This series of sockets on 0.079" (2mm) centers will offer the following options:

- QUAD (four row) Insulator Body
- SMT or Thru-Hole Termination (single, dual row)
- Elevated Socket for PC104/Plus applications
- Shrouded Insulator Option

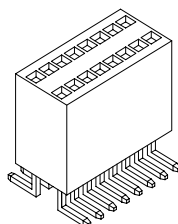
Contact Crane for more information on the availability of these and other new products.

Crane's ATF and AFF Series Sockets Offer High Density Options

Crane's 0.050" (1.27mm) high density sockets are available in both a 0.050" x 0.100" (**ATF**) pin pattern and in a 0.050" x 0.050" (**AFF**) pattern for ultra-dense applications. Both products are excellent for low profile board stacking applications requiring high density (small centers allow tighter packaging). Crane's **ATF** and **AFF** sockets can be combined



ATF (Thru-Hole)

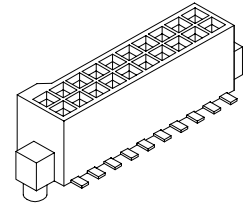


ATF (SMT)

with

Crane's **MPFH** and **MPLH** shrouded pin strip headers to achieve a wide variety of board stacking combinations. Crane's **AFF** (0.050" x 0.050") sockets are also available with polarizing bumps for positive alignment when used with Crane's **MPLF** Series Pin Strip Headers. Alignment posts are also available for proper placement on surface mount applications.

Excellent For Pin-N-Paste Soldering



Both the **ATF** and **AFF** Series sockets are IR, vapor, and wave solder compatible. These sockets are excellent for applications using intrusive ("pin-in-paste" / "paste-in-hole") reflow soldering techniques. Since its tail is coined to 0.018" diameter, the **ATF** Series has even less "tail mass" to interfere with the solder paste upon insertion.

Quik Reference - Board Mount Sockets

SERIES	CENTERLINES	DESCRIPTION
ATP	0.100" x 0.100"	Standard board mount socket
ATL	0.100" x 0.100"	Low insertion force contacts
MATP	0.100" x 0.100"	Elevated board mount socket
MATL	0.100" x 0.100"	Low insertion force contacts
ATS	0.100" x 0.100"	Low profile board mount socket
ABS	0.100" x 0.100"	Low profile, box style contacts
BBP	0.100" x 0.100"	Low profile, top or bottom entry
GATT	0.100" x 0.100"	Standard SMT board mount socket
ATT	0.100" x 0.100"	Standard right angle socket
ABH	0.100" x 0.100"	Side entry board mount socket
ATM	0.079" x 0.079"	Standard board mount socket
AMT*	0.079" x 0.079"	Socket available in quad row ver.
MAMT*	0.079" x 0.079"	Elevated socket for PC-Plus
AFF	0.050" x 0.050"	High density, fine tail socket
ATF	0.050" x 0.100"	High density, fine tail socket
LCC	0.050" x 0.050"	Leaded chip carrier socket

* AMT and MAMT Series will not be available until Spring 1999

Visit us on the Internet at ...

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