

4.1 D-SUBMINIATURE CONNECTORS / M24308 & MOTS

HIGH PERFORMANCE, MOTS D-SUBMINIATURES

SOUPING UP “OLD RELIABLE” FOR YOUR SPECIAL NEEDS

D-Subminiature connectors have been in use for more years than many of us like to admit we remember. While they tend to be too large for some of the newer applications, they can be a perfect solution when space is not at such a premium. The proven reliability of most D-Subs coupled with their flexibility can make them an attractive, low cost choice for the packaging engineer. Cristek offers a wide range of QPL and MOTS D-Subminiature connectors. Here is a summary of some ways to modify your M24308 style connector to meet your own special needs:

Shell & Material Finishes-

Cristek will provide whatever shell finish your application demands. Our standard QPL product comes with cadmium finish over steel shells (whether you order it with or without the “F” suffix on the mil number). Various grades of nickel and gold plating can also be provided. Brass stamped shells and machined aluminum and stainless steel shells are available as well.

Contact Modifications-

The standard PC tails on a D-Sub are .030 or .040” diameter and typically not longer than .185”. Longer tails for thicker boards as well as small diameter for flex termination are available. Tails can be formed into customer configurations for surface mount or extender card terminations.

Mounting Brackets-

When you order right angle PCB M24308’s, you receive a plastic molded rear pin organizer bracket as a standard. The mil spec allows either all plastic or a combination metal/dielectric component. Due to cost impact, most QPL sources supply the plastic product as standard. Cristek stocks the metallized bracket for those who require it.

Hot Solder Dip-

Cristek will hot solder dip your solder tails so you don’t have to. You may specify this requirement as a secondary operation on your purchase order so you can still order a QPL part number.

Termination Sealing-

The PC tail area of the connectors can be sealed to prevent flux and solder entrapment and/or conformal coating contamination.

Environmental Sealing-

Cristek supplies D-Subs with individually sealed contacts and shells for various environmental applications. Gaskets can be supplied with or installed onto modified shells to meet EMI and/or moisture sealing requirements. Glass to metal hermetic versions are also available.

EMI Filtered Versions-

Cristek offers a complete line of EMI filtered M24038 style connectors. Refer to Section 6.4 for ordering details.



- P3 = SHELL PLATING TO BE BRIGHT TIN LEAD
- P6 = SHELL PLATING TO BE CADMIUM PLATE PER QQ-P-416, TYPE II, CLASS 2, WITH SUPPLEMENT YELLOW CHROMATE CONVERSION COATING (CRISTEK STANDARD PLATING).
- P10 = SHELL PLATING TO BE ELECTRO-DEPOSITED NICKEL.
- P20 = SHELL PLATING TO BE OLIVE DRAB CADMIUM.
- K46 = TERMINATION TO INSERT, AND INSERT TO SHELL TO BE SEALED TO PREVENT CHEMICAL INTRUSION FROM REAR OF CONNECTOR AND HAVE TIN DIPPED LEADS (MARKED WITH CRISTEK PART NUMBER).
- K66 = TERMINATION TO INSERT TO BE SEALED TO PREVENT CHEMICAL INTRUSION FROM REAR OF CONNECTOR. (MARKED WITH MIL PART NUMBER).
- K67 = TERMINATION TO INSERT TO BE SEALED TO PREVENT CHEMICAL INTRUSION FROM REAR OF CADMIUM PLATED CONNECTOR (MARKED WITH MIL PART NUMBER).
- K69 = TERMINATION TO HAVE TIN DIPPED LEADS (MARKED WITH MIL PART NUMBER).
- K70 = TERMINATION OF CADMIUM PLATED CONNECTOR TO HAVE TIN DIPPED LEADS (MARKED WITH MIL PART NUMBER).
- K71 = TERMINATION TO INSERT TO BE SEALED TO PREVENT CHEMICAL INTRUSION FROM REAR OF CONNECTOR AND HAVE TIN DIPPED LEADS. (MARKED WITH MIL PART NUMBER.)
- K72 = TERMINATION TO INSERT TO BE SEALED TO PREVENT CHEMICAL INTRUSION FROM REAR OF CADMIUM PLATED CONNECTOR AND HAVE TIN DIPPED LEADS (MARKED WITH MIL PART NUMBER).

Some of these MOTS connectors will require you to consult the factory to obtain ordering information; however, we have included a list of modification codes for some of the more common requests. Simply add a suffix to the basic Cristek part as shown in Figure 4-1.