

DETACHABLES

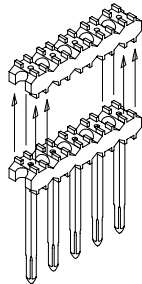
... Save Space!

CINCINNATI, OHIO

SALES BULLETIN SB-0500

A Removable Insulator

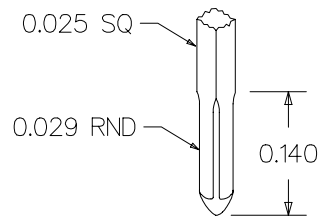
Crane's **DPEG Series** pin strip headers provide a versatile and cost effective option for designers seeking **ULTRA LOW** connector solutions on 0.100" (2,54mm) centers.



Crane's "detachable" insulator can be removed after the part has been soldered to the PC board. This allows the mating socket to mount **FLUSH** with the PC board in many applications. Mated board spacings as low as 0.200" (5,08mm) are achievable with low profile sockets such as Crane's **ABS Series** (see pages 44-45 in our **C57** Full Line Catalog).

The "COINED" Tail Is Key

One of the features of Crane's pin strip headers on 0.100" centers is a **COINED TAIL**. Crane chose this design option years ago when studies indicated that solder wicks more naturally around a "rounded" surface than it does a square one.



Crane's coined tail also makes it easier to place headers on the PCB, especially those with high pin count. As a result of this design, Crane pins have a **TRANSITION POINT** where the coined area – typically about 0.140" in length – meets the 0.025" square body (see illustration above).

NOTE: Crane's headers with **COINED TAILS** are an excellent option for companies using **INTRUSIVE REFLOW** solder techniques. Since the tail is coined, less solder paste is displaced when the connector is inserted into the printed circuit board.

How The Part Works

STEP ONE: The Crane **DPEG Series** pin strip header is placed on the PC board like any other header (see Figure 1). *NOTE: The insulator, which serves as a **CARRIER** for the pins, is pressed onto the pins to a depth of 0.060" providing good retention for transportation, but not enough to prevent easy removal of the insulator after soldering.*

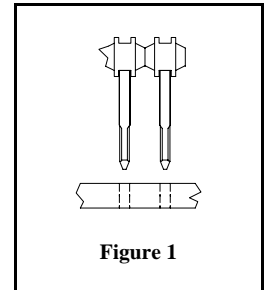


Figure 1

STEP TWO: By drilling an undersized hole (**0.032" +/- .002" is recommended**) in the PCB, Crane's pin strip header will stand off the PC board on the **"SHOULDER"** created at the transition point by the coining process (see Figure 2). The tail penetrates the PCB, but rests on this "shoulder" without letting the entire pin drop through.

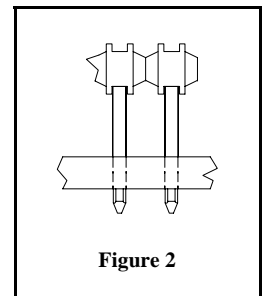


Figure 2

STEP THREE: After placing the part on the board, the header is then soldered in place (see Figure 3). The connector can be soldered in place by wave, reflow or intrusive soldering techniques.

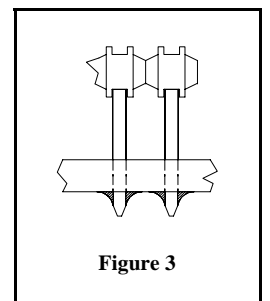


Figure 3

STEP FOUR: Once the connector has been soldered to the board, the insulator is removed by pulling off by hand, or by "popping" off with an appropriate tool (see Figure 4). The insulator is then discarded, leaving the header ready to receive its mating socket, jumper or cable assembly.

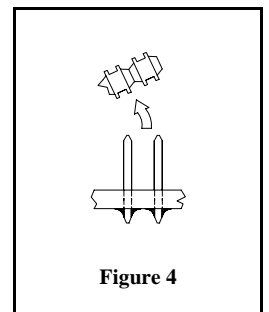


Figure 4

Continued On The Reverse

DPEG Options

Crane's DPEG Series pin strip headers are available in a variety of options including **SINGLE**, **DUAL** and **TRIPLE ROW** versions. Plating options include:

| | MATING AREA | PC TAIL |
|----------|---------------------|------------|
| T | Tin / Lead | Tin / Lead |
| F | Gold Flash | Tin / Lead |
| L | 10 Microinches Gold | Tin / Lead |
| G | 15 Microinches Gold | Tin / Lead |
| H | 30 Microinches Gold | Tin / Lead |
| M | 50 Microinches Gold | Tin / Lead |

Due to number of options, not all platings are stocked for all pin lengths. Contact factory for availability.

Standard mating post lengths for the **DPEG Series** include 0.318", 0.230" and 0.180". Other lengths are available, however.

Uses Of DPEG Series Vary

The uses of Crane's **DPEG Series** pin strip header cover a wide range of applications.

PIN STAKING ALTERNATIVE

One Crane customer, frustrated with the downtime associated with his pinstaking operation, ran tests to see if it would be a cost effective alternative to use Crane's **DPEG Series** connectors. The tests revealed that he would not only save money, but eliminate the noise and "rough handling" associated with pin staking. This customer specifies his DPEGs – he buys 2x25 and 2x40 strips – with four end positions unfilled. He uses this area as a "tab" to pull the insulator off. A Tailored solution!

NOTEBOOK COMPUTERS

This Crane customer utilizes a DPEG10DS-GIR180 pin strip header to manage the tight spacing associated with mounting the panel display in this computer application.

TELECOM SWITCHING

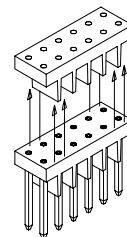
One of Crane's Canadian customers uses two DPEG26DS-HIR180 pin strip headers for an ADD-ON board application where space is at a premium. The application allows the boards to be spaced just 0.200" apart in a "mate-able" connection.

HAND HELD DEVICES

A number of Crane customers utilize our **DPEG Series** headers for the tight applications associated with hand held devices. Typical users of DPEGs include manufacturers of check verification equipment, meters for inventory management, and POS (point of sale) equipment, to name a few HAND HELD applications.

Detachable Insulator Style Available In 2mm Sizes Too!

Crane's DETACHABLE INSULATOR headers are available on 2mm (0.079") centers as well. Called the **DPGM Series** (see pages 60-61 in our C57 Full Line Catalog), these parts are available in both single and dual row options.



When mated with Crane's **ATM Series** board mount sockets, mate-able board-to-board connections as low as 4,50mm (0.177") are achievable.

These parts differ slightly from the **DPEG Series** in that the standoff is provided by a plastic "fin" that separates each contact (see drawing above). The standard mating post on this part is 4,00mm (0.157"). Other options are available as **TAILORED (Non-Standard/No Penalty) PRODUCTS**. Please contact Crane for information on specific applications.

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about Crane products and services, visit
our website at ...*

www.cranecollectors.com