

|                             |                    |                             |
|-----------------------------|--------------------|-----------------------------|
| Model Number<br><b>088A</b> | <b>MODAL PUNCH</b> | Revision: C<br>ECN #: 47972 |
|-----------------------------|--------------------|-----------------------------|

|                                     | <u>ENGLISH</u>     | <u>SI</u>          |        |
|-------------------------------------|--------------------|--------------------|--------|
| <b>Performance</b>                  |                    |                    |        |
| Sensitivity(± 15 %)                 | 10 mV/lbf          | 2.25 mV/N          |        |
| Measurement Range                   | ± 500 lbf pk       | ± 2224 N pk        |        |
| Frequency Range(-10 dB)(Hard Tip)   | 8 kHz              | 8 kHz              | [1][2] |
| Frequency Range(-10 dB)(Medium Tip) | 2.5 kHz            | 2.5 kHz            | [1][2] |
| Resonant Frequency                  | ≥ 10 kHz           | ≥ 10 kHz           |        |
| Non-Linearity                       | ≤ 1 %              | ≤ 1 %              |        |
| <b>Electrical</b>                   |                    |                    |        |
| Excitation Voltage                  | 20 to 30 VDC       | 20 to 30 VDC       |        |
| Constant Current Excitation         | 2 to 20 mA         | 2 to 20 mA         |        |
| Output Impedance                    | ≤ 100 Ohm          | ≤ 100 Ohm          | [1]    |
| Output Bias Voltage                 | 8 to 12 VDC        | 8 to 12 VDC        |        |
| Discharge Time Constant             | ≥ 2000 sec         | ≥ 2000 sec         | [1]    |
| <b>Physical</b>                     |                    |                    |        |
| Sensing Element                     | Quartz             | Quartz             |        |
| Sealing                             | Epoxy              | Epoxy              |        |
| Hammer Mass                         | 3.5 oz             | 100 gm             | [1]    |
| Head Diameter                       | 0.625 in           | 15.9 mm            |        |
| Tip Diameter                        | 0.25 in            | 6.4 mm             |        |
| Size (Height)                       | 6.6 in             | 167.6 mm           |        |
| Extender Mass Weight                | 2.8 oz             | 80 gm              | [1]    |
| Electrical Connector                | 10-32 Coaxial Jack | 10-32 Coaxial Jack |        |

**OPTIONAL VERSIONS**

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

**NOTES:**  
 [1] Typical.  
 [2] Varies depending on test structure. These values are from hitting a stiff steel mass. Hammer did not have extender mass attached.  
 [3] See PCB Declaration of Conformance PS068 for details.

**SUPPLIED ACCESSORIES:**  
 Model 070A41 Modal punch connector adapter, 10-32 connector (1)  
 Model 084A20 Special steel tip, 2" x 1/8" dia. (for Modal punch only) (1)  
 Model 084A80 Modal punch extender, 6" (1)  
 Model 084B03 Hard Tip- Hard (S.S) (1)  
 Model 084B04 Hammer Tip- Medium (White Plastic) (1)  
 Model 085A10 Vinyl Cover For Medium Tip (Blue) (1)  
 Model 085A25 Foam Grip (1)  
 Model HCS-2 Calibration of Series 086 instrumented impact hammers (1)

|                 |                 |                 |                 |                    |
|-----------------|-----------------|-----------------|-----------------|--------------------|
| Entered: LK     | Engineer: SDS   | Sales: WDC      | Approved: JJB   | Spec Number:       |
| Date: 3/16/2018 | Date: 3/16/2018 | Date: 3/16/2018 | Date: 3/16/2018 | <b>088-1010-80</b> |



All specifications are at room temperature unless otherwise specified.  
 In the interest of constant product improvement, we reserve the right to change specifications without notice.  
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**Phone: 716-684-0001**  
**Fax: 716-684-0987**  
**E-Mail: info@pcb.com**