

## THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

## DMD 70 & 100

| Item:         | Dacron/Mylar/Dacron (70 & 100)                                                                                                                                                                                                                                                                                                                                                             |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description:  | Dacron/Mylar/Dacron (DMD) is a series of flexible composites of non-woven polyester mat and electrical grade polyester film, laminated with a high temperature polyester adhesive system. DMD 70 is 70% filled with resin and has a porous, fibrous surface. DMD 100 is 100% filled with resin, providing a smooth, varnish-like surface.                                                  |
| Features:     | UL 1446 (155°C and 180°C) recognized insulation systems, file E60273; MIL-I-22834 & MIL-E-917 D (Navy) certified.<br>Excellent electrical properties and thermal stability, retained flexibility, high tear, tensile, and burst strengths.<br>Excellent moisture and chemical resistance, excellent chemical properties, saturable with resins or varnishes,<br>and cut-through resistant. |
| Applications: | <ul> <li>Phase insulation for random wound motors</li> <li>Excellent slot cell insulation for random and form wound rotating apparatus, manual, or automatic insertion</li> <li>Layer and barrier insulation for dry-type transformers</li> <li>Thermal protection devices</li> </ul>                                                                                                      |

| Dacron/Mylar/Dacron 70     |     |                      |                         |               |                  |                  |  |  |  |
|----------------------------|-----|----------------------|-------------------------|---------------|------------------|------------------|--|--|--|
| Key Characteristics        |     | Units - English (SI) | ts - English (SI) 70222 |               | 70333            | 70353            |  |  |  |
| Nominal Thickness          |     | in (mm)              | 0.006 (0.152)           | 0.008 (0.203) | 0.009 (0.229)    | 0.011 (0.279)    |  |  |  |
| Dielectric Strength        |     | Volts                | 7,300                   | 7,500         | 9,500            | 12,500           |  |  |  |
| Tensile Strength           | MD  | lbs/in               | 60                      | 70            | 90               | 140              |  |  |  |
|                            | CMD | 105/111              | 60                      | 60            | 90               | 125              |  |  |  |
| Graves Tear<br>Strength    | MD  | lbs                  | 6                       | 10            | 13               | 16               |  |  |  |
|                            | CMD | 601                  | 4                       | 6             | 8                | 13               |  |  |  |
| Dielectric Constant, 60 Hz |     |                      | 2.7                     | 2.2           | 2.5              | 2.6              |  |  |  |
| Dissipation Factor, 60 Hz  |     |                      | 0.009                   | 0.004         | 0.005            | 0.005            |  |  |  |
| Volume Resistivity         |     | Ohms-cm              | 10 <sup>15</sup>        | 1015          | 10 <sup>15</sup> | 1015             |  |  |  |
| Surface Resistivity        |     | Ohms                 | 10 <sup>13</sup>        | 1013          | 10 <sup>13</sup> | 10 <sup>13</sup> |  |  |  |

## Dacron/Mylar/Dacron 100

| Key Characteristics        |     | Units   | 100222        | 100353           | 10037H3          | 1003103       | 1003143          | 100555        | 1005145          |
|----------------------------|-----|---------|---------------|------------------|------------------|---------------|------------------|---------------|------------------|
| Nominal Thickness          |     | in (mm) | 0.006 (0.152) | 0.011 (0.279)    | 0.014 (0.355)    | 0.016 (0.406) | 0.020 (0.508)    | 0.015 (0.381) | 0.024 (0.609)    |
| Dielectric Strength        |     | Volts   | 7,500         | 12,000           | 15,000           | 18,000        | 19,600           | 12,500        | 25,500           |
| Tensile Strength           | MD  | lhe /in | 80            | 160              | 190              | 250           | 310              | 190           | 290              |
|                            | CMD | lbs/in  | 70            | 127              | 180              | 240           | 300              | 140           | 270              |
| Graves Tear<br>Strength    | MD  | lbs     | 8             | 18               | 25               | 34            | 42               | 22            | 16               |
|                            | CMD | IDS     | 5             | 13               | 20               | 29            | 38               | 15            | 40               |
| Dielectric Constant, 60 Hz |     |         | 3.68          | 3.68             | 3.68             | 3.68          | 3.68             | 3.68          | 3.68             |
| Dissipation Factor, 60 Hz  |     |         | 0.0116        | 0.0116           | 0.0116           | 0.0116        | 0.0116           | 0.0116        | 0.0116           |
| Volume Resistivity         |     | Ohms-cm | 1016          | 10 <sup>16</sup> | 1016             | 1016          | 1016             | 1016          | 10 <sup>16</sup> |
| Surface Resistivity        |     | Ohms    | 1013          | 10 <sup>13</sup> | 10 <sup>13</sup> | 1013          | 10 <sup>13</sup> | 1013          | 10 <sup>13</sup> |

Data supplied above are typical values and are not to be considered specification values. All of the information, suggestions and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

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